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DATA COMPILATION REPORT: SUBSIDENCE INTERACTION MONITORING IN THE LINGAN MINE MAIN SLOPES DURING WORKING OF THE PHALEN MINE 1 WEST PANEL

W.D. Gallant, D.G. Chipman and T.R.C. Aston

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DATA COMPILATION REPORT: SUBSIDENCE INTERACTION MONITORING IN THE LINGAN MINE MAIN SLOPES DURING WORKING OF THE PHALEN MINE 1 WEST PANEL

by

W.D. Gallant*, D.G. Chipman** and T.R.C. Aston***

SUMMARY

This report describes the instrumentation and procedures used to monitor potential subsidence interaction effects in the Lingan Mine main slopes caused by the working of the Phalen Mine 1 West panel. The results collected during the field program are presented in appendices, but an analysis of the data is not undertaken.

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RAPPORT DE COMPILATION DE DONNÉES : ÉTUDE DE L'INTERACTION DE L'AFFAISSEMENT DANS LES PRINCIPALES DESCENDERIES DE LA MINE LINGAN DURANT L'EXPLOITATION DU PANNEAU N° 1 OUEST DE LA MINE PHALEN

Le présent rapport est une description de l'instrumentation et des méthodes utilisées pour surveiller les effets par interaction de l'affaissement possible dans les principales descenderies de la mine Lingan causés par l'exploitation du panneau n° 1 ouest de la mine Phalen. Les données recueillies au cours du programme de travaux sur le terrain sont présentées en annexe mais aucune analyse des données n'est faite.

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INTRODUCTION

In early 1987, the Cape Breton Development Corporation (CBDC) expressed concern regarding the location of the Phalen Mine 1 West panel startline in relation to potential subsidence interaction effects with the overlying Lingan Mine main slopes. Figure 1 shows the limit of subsidence interaction based on a 35° angle of draw (adopted from U.K. experience). Figure 2 shows a schematic plan of the Lingan main slopes in relation to the Phalen 1 West panel.

The CANMET Cape Breton Coal Research Laboratory (CBCRL) reviewed potential monitoring schemes and recommended a two-phase program. The first phase would involve detailed monitoring of the Lingan main slopes in the vicinity of the Phalen 1 West panel (1). The purpose of this phase was to provide an early warning system for the onset of instability problems within the Lingan main slopes, and provide a method of outlining the area of influence of the subsidence trough and a measure of the damage to roadways.

The second phase would involve a long-term approach to monitor the development of seafloor subsidence profiles using geophysical techniques. The data obtained would then be back analysed to assess the validity of the subsidence prediction techniques currently used in the Sydney Coalfield, N.S.

The report presents a detailed description of the instrumentation program used in the Lingan main slopes and its results, but a detailed analysis of the data is not undertaken.

MONITORING PROGRAM

The program consisted of the following four parts:

1) TILTMETER

Fifty-seven (57) tiltplates were installed to observe surficial ground movements in the Lingan main slopes, Figure 2. A spacing of 30 m was used in 1 and 2 Slopes, while a 75 m spacing was used in 3 and 4 Slopes. The tiltplates would register movements if affected by subsidence.

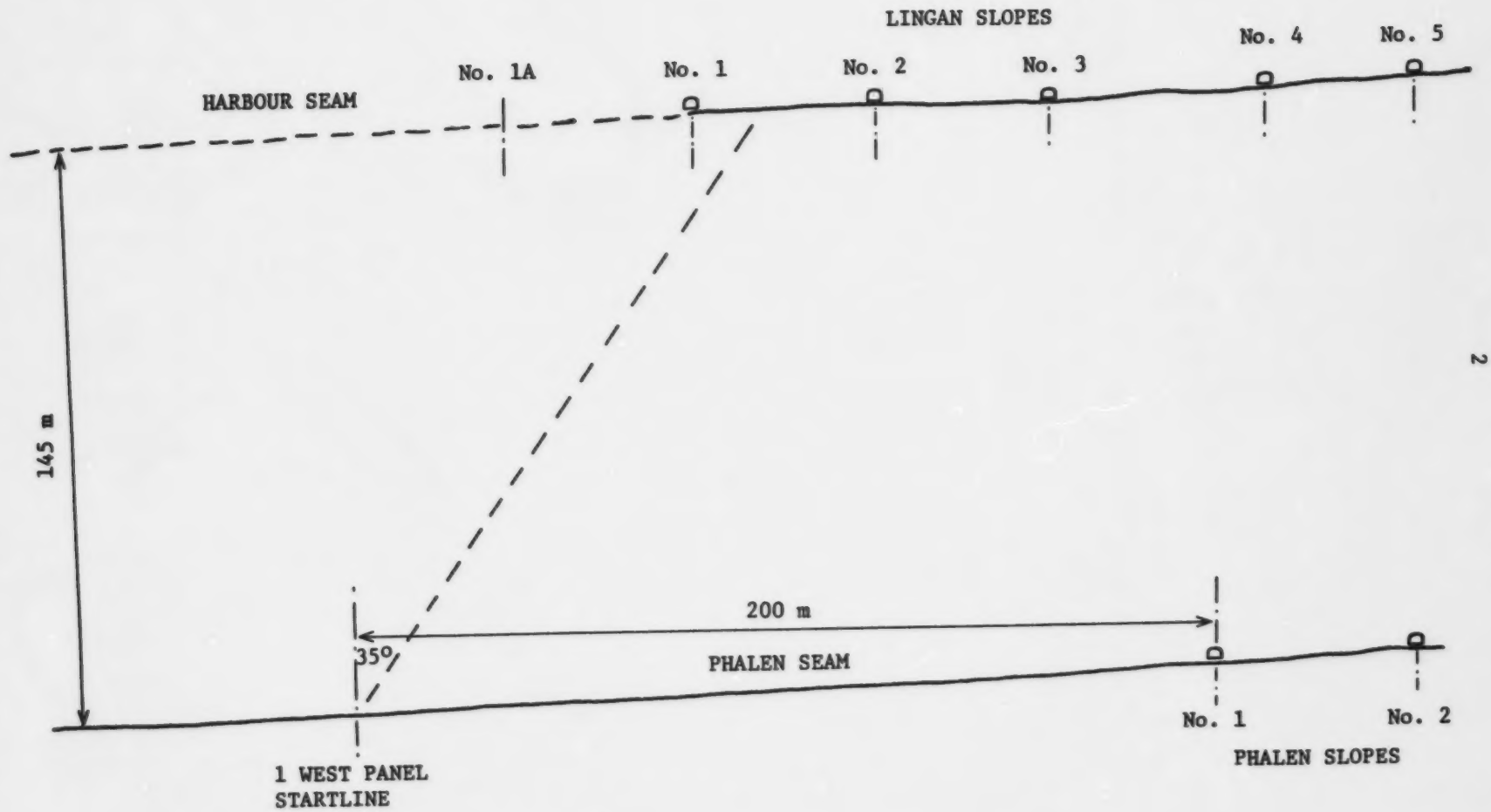

Figure 1 - Schematic showing the limit of subsidence interaction between the Phalen 1 West panel and the Lingan slopes based on an angle of influence of 35°

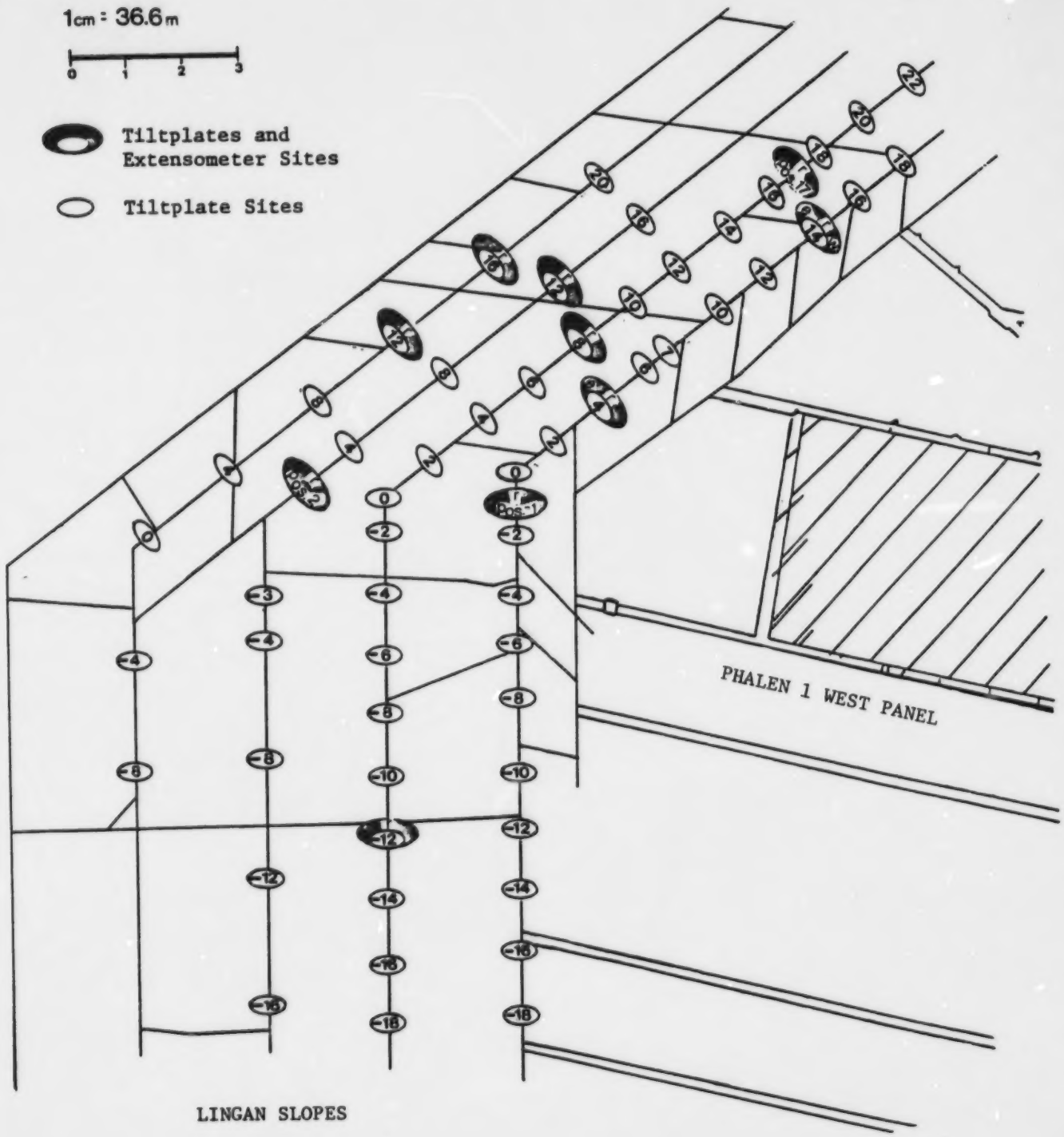

Figure 2 - Schematic plan of Lingan slopes and instrumentation in relation to 1 West panel Phalen Mine

2) EXTENSOMETER

Fifteen (15) extensometers 7.6 m long were installed vertically and horizontally, Figure 2. Differential strata movement about the roadway was monitored to identify roadway damage.

3) SURVEY LEVELLING

A detailed levelling survey of the tiltplates obtained the amount of vertical displacement over the monitoring period.

4) PHOTOGRAPHIC RECORD

Photographic surveys of the main slopes were used to record roadway conditions prior to the extraction of the 1 West panel, enabling a comparison to be made with post-mining conditions.

PROCEDURES

TILTMETER

A SINCO tiltmeter, Model 50344 (servo accelerometer) and Digital Readout Unit, Model 50309-M were used to measure tilt on 150 mm diameter ceramic tiltplates. Mounting anchors were fabricated locally. They consisted of a 0.9 m length of 25 mm diameter rebar onto one end of which was welded a 150 mm x 150 mm x 6.35 mm steel plate, Figure 3. The sensitivity of the tiltmeter is 8 seconds of arc ±.1% (2).

The mounting anchors were generally located close to the rib but this varied with specific site conditions. To install the anchors, a 0.6 m long 38 mm diameter hole was drilled in the floor with a plugger. A resin capsule was placed in the hole followed by the anchor which was hand spun and left to set.

Tiltplates were then affixed to the anchors with DEVCON wet surface repair putty. Three base stations were established in the basement of the Cape Breton Coal Research Laboratory by fixing the tiltplates to the concrete floor. Readings of the 57 plates in the field and 3 base stations were taken prior to the start of Phalen 1 West panel, more frequently (i.e. twice weekly) after it started and intermittently there after. Readings comprised of: date, plate #, Peg 1 value, Peg 3 value, Peg 4 value and Peg 2 value.

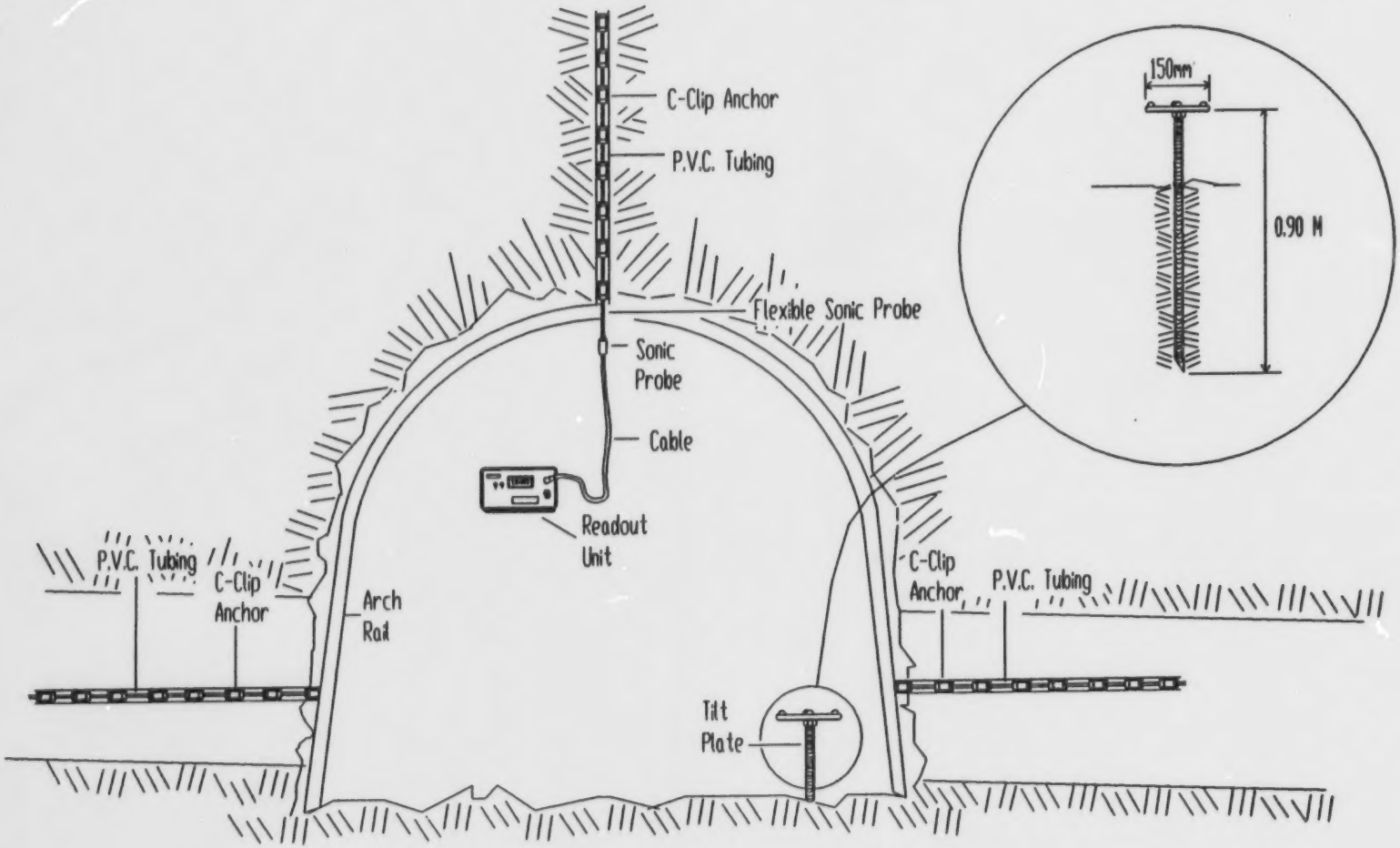

Figure 3 - Schematic section of installation sites

Data from field sheets was transferred to a data base package (dBase III) on an IBM-AT. The calculations required to produce a tilt value were performed by a BASIC program. Appendix A contains, in tabular form, the field readings and calculated tilts.

The equations used to calculate tilts were (2):

$$\text{Tilt North} = \sin^{-1} - [(\text{Peg 1} - \text{Peg 1}') - (\text{Peg 3} - \text{Peg 3}')/5] \quad \text{Eq. 1}$$

$$\text{Tilt East} = \sin^{-1} - [(\text{Peg 4} - \text{Peg 4}') - (\text{Peg 2} - \text{Peg 2}')/5] \quad \text{Eq. 2}$$

where, Peg 1, Peg 2, Peg 3, Peg 4 = Original Readings

Peg 1', Peg 2', Peg 3', Peg 4' = Current Readings

and, Tilt is in degrees

Readings were input to Equations 1 and 2 as direct readout unit values (i.e. .2113 rather than 2113 as suggested in the SINCO manual).

The resulting tilts represent dips in the north and east direction (North = Direction 3⟶ 1 on plate). The sign was changed to reflect a dip. If the dip is north, the north tilt is positive. If the dip is to the south, the north dip is negative.

EXTENSOMETER

The extensometer monitoring system consists of an Irad Gage Flexible Sonic Probe (IGFSP) 7.6 m in length and a MB7 digital readout box. The minimum accuracy is 0.5% of the length being measured, provided the same probe is always used (3). The readout device measures distance in inches sequencially between a reference point (collar anchor) and the anchors spaced along the borehole. A maximum of 10 anchors plus the collar anchor can be placed in each borehole provided that they are at a minimum of 9.0 cm apart.

A stoper equipped with 76 cm lengths of R25 drill steel was used to drive a 38 mm diameter hole 7.6 m vertically into the roof section, Figure 3.

An Auger was used to drive a 50 mm diameter hole 7.6 m horizontally into the rib section of coal. Magnetic PVC C-anchors (38 mm diameter) were then installed using a setting tube. Anchors placed in the rib section were slightly modified using spring steel. The retaining rings were removed and four strips of spring steel banded to the anchor by two hose clamps with each end of the steel being bent out.

Five lengths of central PVC guide tubing were assembled with glue and slid through the anchors secured along the borehole. At the entrance to the borehole, approximately 30 cm of guide tubing protruded and was wedged tightly with wooden slivers. The extensometer probe was passed through the tubing to the depth of the hole. Readings were taken for each anchor in the borehole with respect to the collar anchor.

Readings were taken at the same frequency as that of the tiltplates. Appendix B contains the graphs of the extensometer data.

SURVEY LEVELLING

Survey levelling was completed by CBDC's Survey Department. Elevations were taken to the top of Peg 1 on each tiltplate. Two surveys were performed, April 1987 and February 1988. Appendix C contains graphs representing changes in elevation between surveys.

PHOTOGRAPHIC RECORD

Photographs were taken at 15 m intervals along Slopes 1,2,3 and 4 in March 1987. The procedure was that used for previous gateroad deformation surveys (4). A series of photographs was not taken after the 1 West panel had retreated because the data obtained indicated that no subsidence movement was detected.

DISCUSSION AND RECOMMENDATIONS

This report documents the instrumentation and procedures used to monitor the Lingan Mine main slopes in the vicinity of the Phalen 1 West panel. The results obtained during the monitoring program are also presented in Appendices A to C.

A substantial effort in both cost and manpower was expended by CBCRL and CBDC in monitoring the Lingan Mine main slopes. Although the results

indicate that no subsidence movements were detected, it is considered very important that this, and any further programs, be fully documented for future reference.

The Phalen 1 West panel startline was based on a subsidence angle of draw of 35°. Since no subsidence movement was detected in the Lingan main slopes, the obvious conclusion is that the angle of draw is less than 35°. It is therefore strongly recommended that a similar instrumentation program be implimented to monitor the potential subsidence interaction effects between the Phalen 2 West panel and the Lingan main slopes.

ACKNOWLEDGEMENTS

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2. SINCO "Instruction Manual Tiltmeter Model 50322 and 50344"; Slope Indicator Co. (SINCO); Seattle, WA; 1984.
3. Irad Gage "Instruction Manual: Flexible Sonic Probe Extensometer and Readout Unit - Model FMC"; Irad Gage, Lebanon, New Hampshire; June 1982.
4. Gallant, W.D. "Gateroad deformation survey of the Sydney Coalfield: Approach methodology"; Division Report ERP/CRL 84-12(TR); CANMET, Energy, Mines and Resources Canada; 1984.

APPENDIX A

TILTMETER READINGS AND REDUCED DATA

SLOPE # 0 POSITION 1 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
5/ 4/1987	0.0098	-0.0102	0.0565	-0.0572	0.000	0.000
5/ 5/1987	0.0094	-0.0101	0.0561	-0.0577	-0.006	0.001
5/ 8/1987	0.0088	-0.0106	0.0575	-0.0575	-0.007	0.015
5/12/1987	0.0095	-0.0105	0.0560	-0.0573	0.000	-0.005
5/14/1987	0.0084	-0.0115	0.0550	-0.0583	-0.001	-0.005
5/19/1987	0.0085	-0.0113	0.0551	-0.0582	-0.002	-0.005
5/21/1987	0.0084	-0.0115	0.0551	-0.0584	-0.001	-0.002
5/26/1987	0.0083	-0.0113	0.0551	-0.0585	-0.005	-0.001
5/29/1987	0.0091	-0.0111	0.0557	-0.0582	0.002	0.002
6/ 2/1987	0.0085	-0.0101	0.0552	-0.0583	-0.016	-0.002
6/ 5/1987	0.0086	-0.0112	0.0553	-0.0585	-0.002	0.001
6/ 9/1987	0.0079	-0.0095	0.0551	-0.0581	-0.030	-0.006
6/16/1987	0.0083	-0.0099	0.0555	-0.0578	-0.021	-0.005
6/23/1987	0.0101	-0.0107	0.0561	-0.0570	0.009	-0.007
6/25/1987	0.0095	-0.0101	0.0558	-0.0575	-0.005	-0.005
6/30/1987	0.0083	-0.0117	0.0550	-0.0585	0.000	-0.002
7/ 3/1987	0.0130	-0.0103	0.0566	-0.0571	0.038	0.000
7/10/1987	0.0089	-0.0114	0.0555	-0.0587	0.003	0.006
7/14/1987	0.0091	-0.0110	0.0560	-0.0585	0.001	0.009
7/16/1987	0.0084	-0.0116	0.0552	-0.0586	0.000	0.001
7/23/1987	0.0088	-0.0111	0.0555	-0.0582	-0.001	0.000
7/29/1987	0.0090	-0.0110	0.0558	-0.0581	0.000	0.002
8/12/1987	0.0086	-0.0111	0.0561	-0.0580	-0.003	0.005
8/18/1987	0.0089	-0.0110	0.0557	-0.0581	-0.001	0.001
9/ 1/1987	0.0080	-0.0118	0.0547	-0.0587	-0.002	-0.003
9/18/1987	0.0080	-0.0117	0.0548	-0.0589	-0.003	0.000
10/ 2/1987	0.0089	-0.0109	0.0556	-0.0583	-0.002	0.002
10/ 9/1987	0.0076	-0.0120	0.0547	-0.0591	-0.005	0.001
10/26/1987	0.0080	-0.0117	0.0552	-0.0589	-0.003	0.005
11/16/1987	0.0081	-0.0116	0.0550	-0.0588	-0.003	0.001
11/30/1987	0.0074	-0.0115	0.0551	-0.0587	-0.013	0.001

SLOPE # 0 POSITION 2 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
5/ 4/1987	0.0005	-0.0014	0.0235	-0.0243	0.000	0.000
5/ 5/1987	0.0003	-0.0014	0.0232	-0.0244	-0.002	-0.002
5/ 8/1987	0.0002	-0.0015	0.0232	-0.0246	-0.002	0.000
5/12/1987	0.0001	-0.0016	0.0231	-0.0247	-0.002	0.000
5/14/1987	0.0009	-0.0024	0.0223	-0.0253	0.016	-0.002
5/19/1987	-0.0006	-0.0024	0.0225	-0.0253	-0.001	0.000
5/21/1987	-0.0009	-0.0024	0.0222	-0.0254	-0.005	-0.002
5/26/1987	-0.0013	-0.0024	0.0223	-0.0255	-0.009	0.000
5/29/1987	-0.0005	-0.0032	0.0227	-0.0250	0.009	-0.001
6/ 2/1987	-0.0009	-0.0022	0.0225	-0.0253	-0.007	0.000
6/ 5/1987	-0.0005	-0.0022	0.0226	-0.0251	-0.002	-0.001
6/ 9/1987	-0.0007	-0.0024	0.0220	-0.0254	-0.002	-0.005
6/16/1987	-0.0002	-0.0020	0.0224	-0.0249	-0.001	-0.006
6/23/1987	0.0000	-0.0007	0.0231	-0.0247	-0.014	0.000
6/25/1987	-0.0002	-0.0023	0.0224	-0.0250	0.002	-0.005
6/30/1987	-0.0007	-0.0025	0.0224	-0.0255	-0.001	0.001
7/ 3/1987	0.0006	-0.0019	0.0233	-0.0243	0.007	-0.002
7/10/1987	-0.0007	-0.0031	0.0225	-0.0256	0.006	0.003
7/14/1987	-0.0008	-0.0022	0.0224	-0.0248	-0.006	-0.007
7/16/1987	0.0011	-0.0025	0.0226	-0.0258	0.019	0.007
7/23/1987	0.0006	-0.0023	0.0227	-0.0253	0.011	0.002
7/29/1987	-0.0005	-0.0027	0.0228	-0.0250	0.003	0.000
8/12/1987	0.0003	-0.0022	0.0218	-0.0251	0.007	-0.010
8/18/1987	-0.0003	-0.0023	0.0220	-0.0251	0.001	-0.008
9/ 1/1987	-0.0013	-0.0026	0.0219	-0.0256	-0.007	-0.003
9/18/1987	-0.0012	-0.0030	0.0216	-0.0257	-0.001	-0.006
10/ 2/1987	-0.0005	-0.0017	0.0223	-0.0251	-0.008	-0.005
10/ 9/1987	-0.0014	-0.0028	0.0219	-0.0258	-0.006	-0.001
10/26/1987	-0.0012	-0.0027	0.0222	-0.0258	-0.005	0.002
11/16/1987	-0.0012	-0.0028	0.0222	-0.0265	-0.003	0.010
11/30/1987	-0.0011	-0.0027	0.0224	-0.0257	-0.003	0.003

SLOPE # 0 POSITION 3 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
5/ 4/1987	0.0464	-0.0470	0.0045	-0.0051	0.000	0.000
5/ 5/1987	0.0456	-0.0475	0.0041	-0.0058	-0.003	0.003
5/ 8/1987	0.0457	-0.0475	0.0039	-0.0059	-0.002	0.002
5/12/1987	0.0461	-0.0464	0.0041	-0.0052	-0.010	-0.003
5/14/1987	0.0451	-0.0480	0.0030	-0.0061	-0.003	-0.006
5/19/1987	0.0451	-0.0480	0.0033	-0.0062	-0.003	-0.001
5/21/1987	0.0451	-0.0481	0.0029	-0.0061	-0.002	-0.007
5/26/1987	0.0449	-0.0481	0.0030	-0.0060	-0.005	-0.007
5/29/1987	0.0456	-0.0478	0.0032	-0.0056	0.000	-0.009
6/ 2/1987	0.0450	-0.0480	0.0031	-0.0058	-0.005	-0.008
6/ 5/1987	0.0453	-0.0479	0.0065	-0.0057	-0.002	0.030
6/ 9/1987	0.0451	-0.0480	0.0031	-0.0061	-0.003	-0.005
6/16/1987	0.0455	-0.0475	0.0040	-0.0049	-0.005	-0.008
6/23/1987	0.0461	-0.0471	0.0040	-0.0046	-0.002	-0.011
6/25/1987	0.0456	-0.0475	0.0034	-0.0054	-0.003	-0.009
6/30/1987	0.0450	-0.0484	0.0030	-0.0062	0.000	-0.005
7/ 3/1987	0.0457	-0.0472	0.0036	-0.0052	-0.006	-0.009
7/10/1987	0.0450	-0.0481	0.0032	-0.0055	-0.003	-0.010
7/14/1987	0.0451	-0.0478	0.0037	-0.0060	-0.006	0.001
7/16/1987	0.0449	-0.0453	0.0030	-0.0059	-0.037	-0.008
7/23/1987	0.0455	-0.0481	0.0033	-0.0057	0.002	-0.007
7/29/1987	0.0458	-0.0479	0.0034	-0.0054	0.003	-0.009
8/12/1987	0.0457	-0.0484	0.0034	-0.0061	0.008	-0.001
8/18/1987	0.0457	-0.0482	0.0035	-0.0058	0.006	-0.003
9/ 1/1987	0.0454	-0.0488	0.0026	-0.0064	0.009	-0.007
9/18/1987	0.0452	-0.0489	0.0029	-0.0066	0.008	-0.001
10/ 2/1987	0.0460	-0.0481	0.0039	-0.0057	0.008	0.000
10/ 9/1987	0.0451	-0.0491	0.0026	-0.0067	0.009	-0.003
10/26/1987	0.0454	-0.0488	0.0030	-0.0063	0.009	-0.003
11/16/1987	0.0452	-0.0486	0.0033	-0.0065	0.005	0.002
11/30/1987	0.0456	-0.0488	0.0031	-0.0062	0.011	-0.003

SLOPE # 1 POSITION 18 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1876	0.1866	0.0587	-0.0596	0.000	0.000
4/28/1987	-0.1877	0.1860	0.0584	-0.0601	0.006	0.002
4/30/1987	-0.1880	0.1863	0.0582	-0.0599	-0.001	-0.002
5/ 5/1987	-0.1879	0.1859	0.0585	-0.0599	0.005	0.001
5/ 8/1987	-0.1872	0.1815	0.0586	-0.0600	0.063	0.003
5/12/1987	-0.1878	0.1859	0.0585	-0.0600	0.006	0.002
5/14/1987	-0.1872	0.1858	0.0585	-0.0600	0.014	0.002
5/19/1987	-0.1878	0.1848	0.0578	-0.0606	0.018	0.001
5/21/1987	-0.1879	0.1846	0.0575	-0.0607	0.020	-0.001
5/26/1987	-0.1877	0.1848	0.0577	-0.0605	0.020	-0.001
5/29/1987	-0.1877	0.1849	0.0577	-0.0605	0.018	-0.001
6/ 2/1987	-0.1876	0.1850	0.0578	-0.0604	0.018	-0.001
6/ 5/1987	-0.1884	0.1849	0.0574	-0.0608	0.010	-0.001
6/ 9/1987	-0.1878	0.1860	0.0576	-0.0604	0.005	-0.003
6/16/1987	-0.1875	0.1849	0.0568	-0.0604	0.021	-0.013
6/23/1987	-0.1879	0.1891	0.0569	-0.0606	-0.032	-0.009
6/25/1987	-0.1875	0.1850	0.0576	-0.0602	0.020	-0.006
6/30/1987	-0.1874	0.1845	0.0570	-0.0596	0.026	-0.019
7/ 3/1987	-0.1879	0.1842	0.0573	-0.0608	0.024	-0.002
7/10/1987	-0.1873	0.1853	0.0580	-0.0602	0.018	-0.001
7/14/1987	-0.1876	0.1846	0.0577	-0.0603	0.023	-0.003
7/16/1987	-0.1880	0.1850	0.0578	-0.0605	0.014	0.000
7/23/1987	-0.1880	0.1842	0.0570	-0.0605	0.023	-0.009
7/29/1987	-0.1887	0.1845	0.0578	-0.0588	0.011	-0.019
8/12/1987	-0.1872	0.1847	0.0579	-0.0604	0.026	0.000
8/18/1987	-0.1873	0.1848	0.0581	-0.0607	0.024	0.006
9/ 1/1987	-0.1885	0.1843	0.0577	-0.0606	0.016	0.000
9/18/1987	-0.1875	0.1839	0.0537	-0.0579	0.032	-0.077
10/ 9/1987	-0.1876	0.1837	0.0574	-0.0613	0.033	0.005
10/26/1987	-0.1880	0.1831	0.0572	-0.0610	0.036	-0.001
11/16/1987	-0.1890	0.1832	0.0573	-0.0615	0.023	0.006
11/30/1987	-0.1874	0.1836	0.0567	-0.0615	0.037	-0.001

SLOPE # 1 POSITION 16 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.2034	0.2031	0.1079	-0.1090	0.000	0.000
4/28/1987	-0.2042	0.2061	0.1072	-0.1096	-0.044	-0.001
4/30/1987	-0.2044	0.2031	0.1080	-0.1075	-0.011	-0.016
5/ 5/1987	-0.2042	0.2031	0.1081	-0.1098	-0.009	0.011
5/ 8/1987	-0.2047	0.2032	0.1082	-0.1082	-0.016	-0.006
5/12/1987	-0.2043	0.2030	0.1083	-0.1071	-0.009	-0.017
5/14/1987	-0.2053	0.2032	0.1081	-0.1100	-0.023	0.014
5/19/1987	-0.2051	0.2016	0.1071	-0.1107	-0.002	0.010
5/21/1987	-0.2080	0.2041	0.1066	-0.1101	-0.064	-0.002
5/26/1987	-0.2048	0.2023	0.1076	-0.1107	-0.007	0.016
5/29/1987	-0.2058	0.2023	0.1078	-0.1106	-0.018	0.017
6/ 2/1987	-0.2047	0.2023	0.1078	-0.1107	-0.006	0.018
6/ 5/1987	-0.2049	0.2021	0.1077	-0.1109	-0.006	0.019
6/ 9/1987	-0.2057	0.2030	0.1076	-0.1106	-0.025	0.015
6/16/1987	-0.2048	0.2023	0.1078	-0.1109	-0.007	0.021
6/23/1987	-0.2079	0.2029	0.1074	-0.1107	-0.049	0.014
6/25/1987	-0.2044	0.2025	0.1084	-0.1108	-0.005	0.026
6/30/1987	-0.2050	0.2028	0.1113	-0.1117	-0.015	0.070
7/ 3/1987	-0.2047	0.2019	0.1076	-0.1111	-0.001	0.021
7/10/1987	-0.2045	0.2016	0.1080	-0.1109	0.005	0.023
7/14/1987	-0.2047	0.2023	0.1074	-0.1109	-0.006	0.016
7/16/1987	-0.2049	0.2023	0.1076	-0.1110	-0.008	0.019
7/23/1987	-0.2052	0.2019	0.1069	-0.1109	-0.007	0.010
7/29/1987	-0.2045	0.2022	0.1076	-0.1107	-0.002	0.016
8/12/1987	-0.2046	0.2025	0.1076	-0.1107	-0.007	0.016
9/ 1/1987	-0.2079	0.2038	0.1074	-0.1108	-0.060	0.015
9/18/1987	-0.2048	0.2018	0.1072	-0.1037	-0.001	-0.069
10/ 9/1987	-0.2054	0.2020	0.1071	-0.1112	-0.010	0.016
10/26/1987	-0.2055	0.2016	0.1071	-0.1113	-0.007	0.017
11/16/1987	-0.2051	0.2016	0.1070	-0.1112	-0.002	0.015
11/30/1987	-0.2050	0.2018	0.1075	-0.1114	-0.003	0.023

SLOPE # 1 POSITION 14 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.0267	-0.0271	-0.0347	0.0340	0.000	0.000
4/30/1987	0.0262	-0.0274	-0.0349	0.0330	-0.002	0.009
5/ 5/1987	0.0265	-0.0274	-0.0347	0.0337	0.001	0.003
5/ 8/1987	0.0264	-0.0275	-0.0346	0.0335	0.001	0.007
5/12/1987	0.0261	-0.0276	-0.0347	0.0335	-0.001	0.006
5/14/1987	0.0262	-0.0276	-0.0347	0.0335	0.000	0.006
5/19/1987	0.0255	-0.0282	-0.0356	0.0327	-0.001	0.005
5/21/1987	0.0255	-0.0284	-0.0357	0.0327	0.001	0.003
5/26/1987	0.0254	-0.0283	-0.0352	0.0327	0.001	0.009
5/29/1987	0.0253	-0.0274	-0.0355	0.0330	-0.013	0.002
6/ 2/1987	0.0256	-0.0279	-0.0354	0.0328	-0.003	0.006
6/ 5/1987	0.0255	-0.0284	-0.0354	0.0328	0.001	0.006
6/ 9/1987	0.0258	-0.0281	-0.0354	0.0329	0.001	0.005
6/16/1987	0.0255	-0.0282	-0.0360	0.0328	-0.001	-0.001
6/23/1987	0.0256	-0.0281	-0.0354	0.0329	-0.001	0.005
6/25/1987	0.0249	-0.0281	-0.0354	0.0328	-0.009	0.006
6/30/1987	0.0254	-0.0282	-0.0352	0.0325	-0.002	0.011
7/ 3/1987	0.0255	-0.0284	-0.0356	0.0330	0.001	0.001
7/10/1987	0.0256	-0.0281	0.0354	0.0329	-0.001	0.816
7/10/1987	0.0256	-0.0281	-0.0354	0.0329	-0.001	0.005
7/14/1987	0.0258	-0.0282	-0.0354	0.0330	0.002	0.003
7/16/1987	0.0254	-0.0280	-0.0355	0.0328	-0.005	0.005
7/23/1987	0.0254	-0.0286	-0.0358	0.0329	0.002	0.000
7/29/1987	0.0257	-0.0280	-0.0353	0.0329	-0.001	0.006
8/12/1987	0.0258	-0.0280	-0.0352	0.0329	0.000	0.007
8/18/1987	0.0259	-0.0280	-0.0351	0.0329	0.001	0.008
9/ 1/1987	0.0260	-0.0282	-0.0351	0.0328	0.005	0.009
9/18/1987	0.0256	-0.0280	-0.0355	0.0325	-0.002	0.008
10/ 9/1987	0.0253	-0.0285	-0.0352	0.0320	0.000	0.017
10/26/1987	0.0249	-0.0285	-0.0357	0.0320	-0.005	0.011
11/16/1987	0.0251	-0.0284	-0.0354	0.0319	-0.003	0.016
11/30/1987	0.0254	-0.0282	-0.0352	0.0320	-0.002	0.017

SLOPE # 1 POSITION 14 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.0267	-0.0271	-0.0347	0.0340	0.000	0.000
4/30/1987	0.0262	-0.0274	-0.0349	0.0330	-0.002	0.009
5/ 5/1987	0.0265	-0.0274	-0.0347	0.0337	0.001	0.003
5/ 8/1987	0.0264	-0.0275	-0.0346	0.0335	0.001	0.007
5/12/1987	0.0261	-0.0276	-0.0347	0.0335	-0.001	0.006
5/14/1987	0.0262	-0.0276	-0.0347	0.0335	0.000	0.006
5/19/1987	0.0255	-0.0282	-0.0356	0.0327	-0.001	0.005
5/21/1987	0.0255	-0.0284	-0.0357	0.0327	0.001	0.003
5/26/1987	0.0256	-0.0283	-0.0352	0.0327	0.001	0.009
5/29/1987	0.0253	-0.0274	-0.0355	0.0330	-0.013	0.002
6/ 2/1987	0.0256	-0.0279	-0.0354	0.0328	-0.003	0.006
6/ 5/1987	0.0255	-0.0284	-0.0354	0.0328	0.001	0.006
6/ 9/1987	0.0258	-0.0281	-0.0354	0.0329	0.001	0.005
6/16/1987	0.0255	-0.0282	-0.0360	0.0328	-0.001	-0.001
6/23/1987	0.0256	-0.0281	-0.0354	0.0329	-0.001	0.005
6/25/1987	0.0249	-0.0281	-0.0354	0.0328	-0.009	0.006
6/30/1987	0.0254	-0.0282	-0.0352	0.0325	-0.002	0.011
7/ 3/1987	0.0255	-0.0284	-0.0356	0.0330	0.001	0.001
7/10/1987	0.0256	-0.0281	0.0354	0.0329	-0.001	0.816
7/10/1987	0.0256	-0.0281	-0.0354	0.0329	-0.001	0.005
7/14/1987	0.0258	-0.0282	-0.0354	0.0330	0.002	0.003
7/16/1987	0.0254	-0.0280	-0.0355	0.0328	-0.005	0.005
7/23/1987	0.0254	-0.0286	-0.0358	0.0329	0.002	0.000
7/29/1987	0.0257	-0.0280	-0.0353	0.0329	-0.001	0.006
8/12/1987	0.0258	-0.0280	-0.0352	0.0329	0.000	0.007
8/18/1987	0.0259	-0.0280	-0.0351	0.0329	0.001	0.008
9/ 1/1987	0.0260	-0.0282	-0.0351	0.0328	0.005	0.009
9/18/1987	0.0256	-0.0280	-0.0355	0.0325	-0.002	0.008
10/ 9/1987	0.0253	-0.0285	-0.0352	0.0320	0.000	0.017
10/26/1987	0.0249	-0.0285	-0.0357	0.0320	-0.005	0.011
11/16/1987	0.0251	-0.0284	-0.0354	0.0319	-0.003	0.016
11/30/1987	0.0254	-0.0282	-0.0352	0.0320	-0.002	0.017

SLOPE # 1 , POSITION 12 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.2248	0.2246	0.1083	-0.1088	0.000	0.000
4/28/1987	-0.2251	0.2241	0.1075	-0.1079	0.002	-0.019
4/30/1987	-0.2252	0.2242	0.1078	-0.1093	0.000	0.000
5/ 5/1987	-0.2251	0.2242	0.1078	-0.1091	0.001	-0.002
5/ 8/1987	-0.2251	0.2240	0.1079	-0.1091	0.003	-0.001
5/12/1987	-0.2250	0.2265	0.1078	-0.1089	-0.024	-0.005
5/14/1987	-0.2275	0.2251	0.1078	-0.1090	-0.037	-0.003
5/19/1987	-0.2272	0.2247	0.1067	-0.1093	-0.029	-0.013
5/21/1987	-0.2259	0.2232	0.1067	-0.1069	0.003	-0.040
5/26/1987	-0.2259	0.2233	0.1069	-0.1096	0.002	-0.007
5/29/1987	-0.2272	0.2234	0.1062	-0.1088	-0.014	-0.024
6/ 2/1987	-0.2259	0.2234	0.1065	-0.1095	0.001	-0.013
6/ 5/1987	-0.2257	0.2259	0.1070	-0.1088	-0.025	-0.015
6/ 9/1987	-0.2259	0.2235	0.1068	-0.1087	0.000	-0.018
6/16/1987	-0.2264	0.2236	0.1072	-0.1094	-0.007	-0.006
6/23/1987	-0.2259	0.2233	0.1069	-0.1079	0.002	-0.026
6/25/1987	-0.2258	0.2244	0.1065	-0.1092	-0.009	-0.016
6/30/1987	-0.2259	0.2233	0.1069	-0.1092	0.002	-0.011
7/ 3/1987	-0.2258	0.2232	0.1065	-0.1092	0.005	-0.016
7/10/1987	-0.2259	0.2233	0.1065	-0.1088	0.002	-0.021
7/14/1987	-0.2258	0.2233	0.1064	-0.1089	0.003	-0.021
7/16/1987	-0.2257	0.2232	0.1064	-0.1090	0.006	-0.019
7/23/1987	-0.2261	0.2230	0.1059	-0.1088	0.003	-0.028
7/29/1987	-0.2255	0.2232	0.1063	-0.1087	0.008	-0.024
8/12/1987	-0.2256	0.2233	0.1061	-0.1083	0.006	-0.031
8/18/1987	-0.2254	0.2235	0.1063	-0.1083	0.006	-0.029
9/ 1/1987	-0.2259	0.2230	0.1059	-0.1080	0.006	-0.037
9/18/1987	-0.2259	0.2226	0.1051	-0.1083	0.010	-0.042
10/ 9/1987	-0.2266	0.2227	0.1049	-0.1081	0.001	-0.047
10/26/1987	-0.2264	0.2224	0.1047	-0.1080	0.007	-0.050
11/16/1987	-0.2260	0.2226	0.1045	-0.1076	0.009	-0.057
11/30/1987	-0.2259	0.2227	0.1046	-0.1076	0.009	-0.056

SLOPE # 1 POSITION 10 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1159	0.1156	-0.0391	0.0390	0.000	0.000
4/28/1987	-0.1162	0.1146	-0.0394	0.0384	0.008	0.003
4/30/1987	-0.1161	0.1152	-0.0394	0.0384	0.002	0.003
5/ 5/1987	-0.1160	0.1151	-0.0393	0.0386	0.005	0.002
5/ 8/1987	-0.1157	0.1150	-0.0391	0.0385	0.009	0.006
5/12/1987	-0.1164	0.1152	-0.0391	0.0384	-0.001	0.007
5/14/1987	-0.1161	0.1151	-0.0391	0.0384	0.003	0.007
5/19/1987	-0.1162	0.1141	-0.0453	0.0374	0.014	-0.053
5/21/1987	-0.1170	0.1135	-0.0401	0.0375	0.011	0.006
5/26/1987	-0.1165	0.1144	-0.0398	0.0374	0.007	0.010
5/29/1987	-0.1169	0.1131	-0.0398	0.0376	0.017	0.008
6/ 2/1987	-0.1173	0.1146	-0.0427	0.0374	-0.005	-0.023
6/ 5/1987	-0.1170	0.1148	-0.0397	0.0374	-0.003	0.011
6/ 9/1987	-0.1171	0.1147	-0.0396	0.0380	-0.003	0.006
6/16/1987	-0.1173	0.1149	-0.0406	0.0373	-0.008	0.002
6/23/1987	-0.1174	0.1159	-0.0397	0.0372	-0.021	0.014
6/25/1987	-0.1174	0.1150	-0.0393	0.0373	-0.010	0.017
6/30/1987	-0.1176	0.1146	-0.0395	0.0373	-0.008	0.015
7/ 3/1987	-0.1175	0.1152	-0.0393	0.0394	-0.014	-0.007
7/10/1987	-0.1175	0.1152	-0.0400	0.0370	-0.014	0.013
7/14/1987	-0.1176	0.1153	-0.0392	0.0369	-0.016	0.023
7/16/1987	-0.1177	0.1154	-0.0594	0.0370	-0.018	-0.210
7/16/1987	-0.1177	0.1154	-0.0394	0.0370	-0.018	0.019
7/23/1987	-0.1162	0.1149	-0.0397	0.0366	0.005	0.021
7/29/1987	-0.1165	0.1130	-0.0406	0.0370	0.023	0.006
8/12/1987	-0.1177	0.1154	-0.0390	0.0367	-0.018	0.028
8/18/1987	-0.1176	0.1159	-0.0387	0.0371	-0.023	0.026
9/ 1/1987	-0.1178	0.1157	-0.0389	0.0367	-0.023	0.029
9/18/1987	-0.1183	0.1132	-0.0393	0.0364	0.000	0.028
10/ 9/1987	-0.1186	0.1158	-0.0387	0.0360	-0.033	0.039
10/26/1987	-0.1190	0.1156	-0.0386	0.0354	-0.036	0.047
11/16/1987	-0.1190	0.1159	-0.0396	0.0353	-0.039	0.037
11/30/1987	-0.1189	0.1160	-0.0381	0.0352	-0.039	0.055

SLOPE # 1 POSITION 7 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1417	0.1412	0.1493	-0.1500	0.000	0.000
4/28/1987	-0.1421	0.1406	0.1486	-0.1501	0.002	-0.007
4/30/1987	-0.1422	0.1409	0.1488	-0.1502	-0.002	-0.003
5/ 5/1987	-0.1422	0.1408	0.1485	-0.1502	-0.001	-0.007
5/ 8/1987	-0.1418	0.1409	0.1488	-0.1500	0.002	-0.006
5/12/1987	-0.1419	0.1447	0.1486	-0.1501	-0.042	-0.007
5/14/1987	-0.1424	0.1408	0.1489	-0.1492	-0.003	-0.014
5/19/1987	-0.1492	0.1408	0.1475	-0.1508	-0.081	-0.011
5/21/1987	-0.1426	0.1464	0.1476	-0.1507	-0.070	-0.011
5/26/1987	-0.1430	0.1400	0.1477	-0.1506	-0.001	-0.011
5/29/1987	-0.1429	0.1402	0.1510	-0.1505	-0.002	0.025
6/ 2/1987	-0.1430	0.1411	0.1478	-0.1502	-0.014	-0.015
6/ 5/1987	-0.1429	0.1400	0.1475	-0.1504	0.000	-0.016
6/ 9/1987	-0.1430	0.1418	0.1475	-0.1501	-0.022	-0.020
6/16/1987	-0.1430	0.1401	0.1471	-0.1497	-0.002	-0.029
6/23/1987	-0.1432	0.1450	0.1467	-0.1496	-0.061	-0.034
6/25/1987	-0.1430	0.1406	0.1468	-0.1494	-0.008	-0.036
6/30/1987	-0.1431	0.1400	0.1459	-0.1476	-0.002	-0.067
7/ 3/1987	-0.1430	0.1401	0.1462	-0.1490	-0.002	-0.047
7/10/1987	-0.1433	0.1403	0.1459	-0.1487	-0.008	-0.054
7/14/1987	-0.1433	0.1403	0.1456	-0.1483	-0.008	-0.062
7/16/1987	-0.1458	0.1482	0.1405	-0.1433	-0.127	-0.178
7/23/1987	-0.1439	0.1402	0.1450	-0.1481	-0.014	-0.071
7/29/1987	-0.1437	0.1404	0.1446	-0.1477	-0.014	-0.080
8/12/1987	-0.1434	0.1406	0.1449	-0.1474	-0.013	-0.080
8/18/1987	-0.1432	0.1418	0.1450	-0.1475	-0.024	-0.078
9/ 1/1987	-0.1436	0.1406	0.1445	-0.1470	-0.015	-0.090
9/18/1987	-0.1450	0.1413	0.1441	-0.1472	-0.039	-0.092
10/ 9/1987	-0.1444	0.1484	0.1439	-0.1469	-0.114	-0.098
10/26/1987	-0.1444	0.1403	0.1432	-0.1465	-0.021	-0.110
11/16/1987	-0.1442	0.1405	0.1432	-0.1460	-0.021	-0.116
11/30/1987	-0.1442	0.1404	0.1432	-0.1460	-0.020	-0.116

SLOPE # 1 POSITION 6 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0579	0.0574	-0.0350	0.0344	0.000	0.000
4/28/1987	-0.0581	0.0569	-0.0352	0.0336	0.003	0.007
4/30/1987	-0.0578	0.0570	-0.0358	0.0339	0.006	-0.003
5/ 5/1987	-0.0582	0.0571	-0.0351	0.0337	0.000	0.007
5/ 8/1987	-0.0582	0.0572	-0.0350	0.0338	-0.001	0.007
5/12/1987	-0.0582	0.0571	-0.0350	0.0340	0.000	0.005
5/14/1987	-0.0582	0.0570	-0.0352	0.0337	0.001	0.006
5/19/1987	-0.0592	0.0562	-0.0360	0.0328	-0.001	0.007
5/21/1987	-0.0592	0.0562	-0.0360	0.0329	-0.001	0.006
5/26/1987	-0.0591	0.0565	-0.0358	0.0330	-0.003	0.007
5/29/1987	-0.0591	0.0566	-0.0360	0.0331	-0.005	0.003
6/ 2/1987	-0.0592	0.0567	-0.0366	0.0329	-0.007	-0.001
6/ 5/1987	-0.0592	0.0568	-0.0357	0.0328	-0.008	0.010
6/ 9/1987	-0.0593	0.0562	-0.0355	0.0327	-0.002	0.014
6/16/1987	-0.0596	0.0572	-0.0352	0.0326	-0.017	0.018
6/23/1987	-0.0600	0.0565	-0.0356	0.0322	-0.014	0.018
6/25/1987	-0.0599	0.0572	-0.0353	0.0326	-0.021	0.017
6/30/1987	-0.0599	0.0569	-0.0353	0.0329	-0.017	0.014
7/ 3/1987	-0.0600	0.0571	-0.0357	0.0320	-0.021	0.019
7/10/1987	-0.0601	0.0573	-0.0352	0.0319	-0.024	0.026
7/14/1987	-0.0601	0.0573	-0.0350	0.0321	-0.024	0.026
7/16/1987	-0.0601	0.0573	-0.0353	0.0319	-0.024	0.025
7/23/1987	-0.0604	0.0572	-0.0350	0.0318	-0.026	0.030
7/29/1987	-0.0601	0.0573	-0.0348	0.0318	-0.024	0.032
8/12/1987	-0.0601	0.0575	-0.0357	0.0321	-0.026	0.018
8/18/1987	-0.0600	0.0577	-0.0347	0.0322	-0.028	0.029
9/ 1/1987	-0.0601	0.0573	-0.0351	0.0324	-0.024	0.022
9/18/1987	-0.0604	0.0574	-0.0357	0.0325	-0.029	0.014
10/ 9/1987	-0.0604	0.0574	-0.0358	0.0323	-0.029	0.015
10/26/1987	-0.0608	0.0570	-0.0358	0.0323	-0.029	0.015
11/16/1987	-0.0604	0.0568	-0.0360	0.0324	-0.022	0.011
11/30/1987	-0.0604	0.0570	-0.0359	0.0324	-0.024	0.013

SLOPE # 1 POSITION 4 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.2301	0.2297	-0.1043	0.1038	0.000	0.000
4/28/1987	-0.2304	0.2290	-0.1042	0.1046	0.005	-0.008
4/30/1987	-0.2299	0.2282	-0.1041	0.1035	0.020	0.006
5/ 5/1987	-0.2304	0.2260	-0.1044	0.1034	0.039	0.003
5/ 8/1987	-0.2304	0.2291	-0.1043	0.1039	0.003	-0.001
5/12/1987	-0.2303	0.2288	-0.1044	0.1036	0.008	0.001
5/14/1987	-0.2297	0.2289	-0.1045	0.1037	0.014	-0.001
5/19/1987	-0.2306	0.2276	-0.1056	0.1030	0.018	-0.006
5/21/1987	-0.2269	0.2277	-0.1062	0.1044	0.060	-0.029
5/26/1987	-0.2282	0.2277	-0.1055	0.1032	0.045	-0.007
5/29/1987	-0.2300	0.2274	-0.1058	0.1035	0.028	-0.014
6/ 2/1987	-0.2295	0.2200	-0.1057	0.1033	0.119	-0.010
6/ 5/1987	-0.2292	0.2267	-0.1056	0.1092	0.045	-0.077
6/ 9/1987	-0.2262	0.2228	-0.1059	0.1036	0.124	-0.016
6/16/1987	-0.2280	0.2224	-0.1063	0.1036	0.108	-0.021
6/23/1987	-0.2278	0.2246	-0.1061	0.1032	0.085	-0.014
6/25/1987	-0.2274	0.2250	-0.1060	0.1037	0.085	-0.018
6/30/1987	-0.2266	0.2234	-0.1117	0.1090	0.113	-0.145
7/ 3/1987	-0.2264	0.2237	-0.1064	0.1040	0.112	-0.026
7/10/1987	-0.2262	0.2232	-0.1068	0.1042	0.120	-0.033
7/14/1987	-0.2259	0.2231	-0.1070	0.1044	0.124	-0.038
7/16/1987	-0.2259	0.2230	-0.1071	0.1044	0.125	-0.039
7/23/1987	-0.2256	0.2231	-0.1076	0.1046	0.128	-0.047
7/29/1987	-0.2259	0.2234	-0.1069	0.1059	0.121	-0.054
8/12/1987	-0.2258	0.2234	-0.1072	0.1051	0.122	-0.048
8/18/1987	-0.2255	0.2230	-0.1071	0.1049	0.130	-0.045
9/ 1/1987	-0.2254	0.2227	-0.1076	0.1045	0.135	-0.046
9/18/1987	-0.2255	0.2197	-0.1077	0.1049	0.168	-0.052
10/ 9/1987	-0.2247	0.2223	-0.1073	0.1050	0.147	-0.048
10/26/1987	-0.2264	0.2220	-0.1074	0.1051	0.131	-0.050
11/16/1987	-0.2249	0.2245	-0.1076	0.1044	0.120	-0.045
11/30/1987	-0.2245	0.2213	-0.1074	0.1044	0.161	-0.042

SLOPE # 1 POSITION 2 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0187	0.0186	0.1045	-0.1050	0.000	0.000
4/28/1987	-0.0191	0.0180	0.1039	-0.1055	0.002	-0.001
4/30/1987	-0.0188	0.0181	0.1041	-0.1054	0.005	0.000
5/ 5/1987	-0.0200	0.0181	0.1040	-0.1055	-0.009	0.000
5/ 8/1987	-0.0187	0.0183	0.1041	-0.1052	0.003	-0.002
5/12/1987	-0.0188	0.0182	0.1041	-0.1056	0.003	0.002
5/14/1987	-0.0188	0.0181	0.1041	-0.1053	0.005	-0.001
5/19/1987	-0.0198	0.0179	0.1032	-0.1064	-0.005	0.001
5/21/1987	-0.0200	0.0174	0.1034	-0.1063	-0.001	0.002
5/26/1987	-0.0197	0.0176	0.1036	-0.1065	0.000	0.007
5/29/1987	-0.0199	0.0178	0.1037	-0.1066	-0.005	0.009
6/ 2/1987	-0.0200	0.0180	0.1038	-0.1066	-0.008	0.010
6/ 5/1987	-0.0200	0.0179	0.1039	-0.1067	-0.007	0.013
6/ 9/1987	-0.0200	0.0189	0.1032	-0.1067	-0.018	0.005
6/16/1987	-0.0203	0.0187	0.1039	-0.1069	-0.019	0.015
6/23/1987	-0.0229	0.0179	0.1040	-0.1071	-0.040	0.018
6/25/1987	-0.0207	0.0183	0.1041	-0.1071	-0.019	0.019
6/30/1987	-0.0208	0.0183	0.1040	-0.1075	-0.021	0.023
7/ 3/1987	-0.0205	0.0189	0.1042	-0.1068	-0.024	0.017
7/10/1987	-0.0208	0.0186	0.1042	-0.1073	-0.024	0.023
7/14/1987	-0.0208	0.0186	0.1044	-0.1074	-0.024	0.026
7/16/1987	-0.0208	0.0186	0.1043	-0.1072	-0.024	0.023
7/23/1987	-0.0209	0.0187	0.1043	-0.1073	-0.026	0.024
7/29/1987	-0.0205	0.0187	0.1044	-0.1072	-0.022	0.024
8/12/1987	-0.0204	0.0183	0.1042	-0.1072	-0.016	0.022
8/18/1987	-0.0203	0.0186	0.1044	-0.1072	-0.018	0.024
9/ 1/1987	-0.0221	0.0187	0.1041	-0.1067	-0.040	0.015
9/18/1987	-0.0211	0.0188	0.1038	-0.1074	-0.030	0.019
10/ 9/1987	-0.0205	0.0195	0.1041	-0.1067	-0.031	0.015
10/26/1987	-0.0217	0.0187	0.1038	-0.1073	-0.036	0.018
11/16/1987	-0.0216	0.0187	0.1036	-0.1068	-0.034	0.010
11/30/1987	-0.0213	0.0186	0.1037	-0.1073	-0.030	0.017

SLOPE # 1 POSITION 0 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0691	0.0692	-0.0331	0.0323	0.000	0.000
4/28/1987	-0.0701	0.0688	-0.0338	0.0320	-0.007	-0.005
4/30/1987	-0.0702	0.0692	-0.0336	0.0322	-0.013	-0.005
5/ 5/1987	-0.0702	0.0690	-0.0338	0.0322	-0.010	-0.007
5/ 8/1987	-0.0701	0.0690	-0.0337	0.0322	-0.009	-0.006
5/12/1987	-0.0700	0.0689	-0.0336	0.0322	-0.007	-0.005
5/19/1987	-0.0720	0.0685	-0.0346	0.0313	-0.025	-0.006
5/21/1987	-0.0715	0.0692	-0.0347	0.0312	-0.028	-0.006
5/26/1987	-0.0718	0.0692	-0.0342	0.0313	-0.031	-0.001
5/29/1987	-0.0717	0.0693	-0.0345	0.0313	-0.031	-0.005
6/ 2/1987	-0.0718	0.0692	-0.0364	0.0314	-0.031	-0.028
6/ 5/1987	-0.0715	0.0694	-0.0357	0.0314	-0.030	-0.019
6/ 9/1987	-0.0718	0.0694	-0.0342	0.0313	-0.033	-0.001
6/16/1987	-0.0718	0.0699	-0.0341	0.0312	-0.039	0.001
6/23/1987	-0.0712	0.0692	-0.0406	0.0308	-0.024	-0.069
6/25/1987	-0.0717	0.0693	-0.0342	0.0308	-0.031	0.005
6/30/1987	-0.0719	0.0693	-0.0339	0.0308	-0.033	0.008
7/ 3/1987	-0.0717	0.0693	-0.0342	0.0311	-0.031	0.001
7/10/1987	-0.0717	0.0692	-0.0341	0.0308	-0.030	0.006
7/14/1987	-0.0717	0.0694	-0.0341	0.0308	-0.032	0.006
7/16/1987	-0.0714	0.0696	-0.0340	0.0308	-0.031	0.007
8/12/1987	-0.0787	0.0766	-0.0335	0.0307	-0.195	0.014
8/18/1987	-0.0789	0.0766	-0.0334	0.0307	-0.197	0.015
9/ 1/1987	-0.0785	0.0765	-0.0334	0.0306	-0.191	0.016
9/18/1987	-0.0793	0.0761	-0.0336	0.0301	-0.196	0.019
10/ 9/1987	0.0065	0.0767	-0.0328	-0.0305	0.781	0.723
10/26/1987	-0.0793	0.0762	-0.0335	0.0301	-0.197	0.021
11/16/1987	-0.0794	0.0763	-0.0337	0.0306	-0.199	0.013
11/30/1987	-0.0793	0.0762	-0.0337	0.0301	-0.197	0.018

SLOPE # 1 POSITION -2 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1559	0.1553	0.1267	-0.1272	0.000	0.000
4/28/1987	-0.1562	0.1548	0.1262	-0.1275	0.002	-0.002
4/30/1987	-0.1563	0.1549	0.1264	-0.1276	0.000	0.001
5/ 5/1987	-0.1563	0.1550	0.1264	-0.1275	-0.001	0.000
5/ 8/1987	-0.1569	0.1549	0.1265	-0.1277	-0.007	0.003
5/12/1987	-0.1562	0.1549	0.1265	-0.1276	0.001	0.002
5/14/1987	-0.1564	0.1549	0.1237	-0.1276	-0.001	-0.030
5/19/1987	-0.1574	0.1588	0.1254	-0.1281	-0.057	-0.005
5/21/1987	-0.1576	0.1538	0.1250	-0.1282	-0.002	-0.008
5/26/1987	-0.1586	0.1543	0.1256	-0.1282	-0.020	-0.001
5/29/1987	-0.1570	0.1542	0.1232	-0.1283	0.000	-0.028
6/ 2/1987	-0.1599	0.1542	0.1257	-0.1282	-0.033	0.000
6/ 5/1987	-0.1568	0.1541	0.1255	-0.1286	0.003	0.002
6/ 9/1987	-0.1570	0.1530	0.1250	-0.1286	0.014	-0.003
6/16/1987	-0.1570	0.1541	0.1240	-0.1271	0.001	-0.032
6/23/1987	-0.1569	0.1540	0.1256	-0.1284	0.003	0.001
6/25/1987	-0.1582	0.1541	0.1254	-0.1282	-0.013	-0.003
6/30/1987	-0.1568	0.1533	0.1255	-0.1281	0.013	-0.003
7/ 3/1987	-0.1566	0.1538	0.1255	-0.1281	0.009	-0.003
7/10/1987	-0.1567	0.1535	0.1254	-0.1282	0.011	-0.003
7/14/1987	-0.1566	0.1535	0.1252	-0.1281	0.013	-0.007
7/16/1987	-0.1566	0.1537	0.1255	-0.1279	0.010	-0.006
7/23/1987	-0.1565	0.1534	0.1255	-0.1279	0.015	-0.006
7/29/1987	-0.1564	0.1537	0.1255	-0.1272	0.013	-0.014
8/12/1987	-0.1566	0.1536	0.1253	-0.1284	0.011	-0.002
8/18/1987	-0.1560	0.1537	0.1253	-0.1275	0.017	-0.013
9/ 1/1987	-0.1565	0.1536	0.1253	-0.1274	0.013	-0.014
9/18/1987	-0.1567	0.1533	0.1247	-0.1276	0.014	-0.018
10/ 9/1987	-0.1557	0.1568	0.1247	-0.1285	-0.015	-0.008
10/26/1987	-0.1565	0.1529	0.1244	-0.1270	0.021	-0.029
11/16/1987	-0.1566	0.1529	0.1240	-0.1270	0.020	-0.033
11/30/1987	-0.1566	0.1531	0.1242	-0.1270	0.017	-0.031

SLOPE # 1 POSITION -4 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1283	0.1267	-0.1321	0.1308	0.000	0.000
4/28/1987	-0.1283	0.1267	-0.1320	0.1304	0.000	0.006
4/30/1987	-0.1286	0.1270	-0.1323	0.1307	-0.007	-0.001
5/ 5/1987	-0.1284	0.1269	-0.1321	0.1312	-0.003	-0.005
5/ 8/1987	-0.1285	0.1270	-0.1321	0.1307	-0.006	0.001
5/12/1987	-0.1285	0.1269	-0.1321	0.1307	-0.005	0.001
5/14/1987	-0.1286	0.1269	-0.1320	0.1311	-0.006	-0.002
5/19/1987	-0.1291	0.1253	-0.1326	0.1296	0.007	0.008
5/21/1987	-0.1236	0.1258	-0.1328	0.1295	0.064	0.007
5/26/1987	-0.1291	0.1261	-0.1325	0.1298	-0.002	0.007
6/ 2/1987	-0.1289	0.1261	-0.1327	0.1295	0.000	0.008
6/ 5/1987	-0.1292	0.1261	-0.1324	0.1296	-0.003	0.010
6/ 9/1987	-0.1290	0.1262	-0.1328	0.1297	-0.002	0.005
6/16/1987	-0.1283	0.1247	-0.1323	0.1289	0.023	0.020
6/23/1987	-0.1292	0.1257	-0.1327	0.1290	0.001	0.014
6/25/1987	-0.1286	0.1261	-0.1321	0.1295	0.003	0.015
6/30/1987	-0.1289	0.1259	-0.1326	0.1291	0.002	0.014
7/ 3/1987	-0.1290	0.1261	-0.1321	0.1293	-0.001	0.017
7/10/1987	-0.1292	0.1260	-0.1319	0.1289	-0.002	0.024
7/14/1987	-0.1292	0.1262	-0.1317	0.1290	-0.005	0.025
7/16/1987	-0.1295	0.1264	-0.1317	0.1290	-0.010	0.025
7/23/1987	-0.1290	0.1267	-0.1316	0.1294	-0.008	0.022
7/29/1987	-0.1290	0.1262	-0.1316	0.1314	-0.002	-0.001
8/12/1987	-0.1295	0.1264	-0.1317	0.1291	-0.010	0.024
8/18/1987	-0.1291	0.1266	-0.1314	0.1288	-0.008	0.031
9/ 1/1987	-0.1293	0.1265	-0.1309	0.1286	-0.009	0.039
9/18/1987	-0.1297	0.1262	-0.1310	0.1277	-0.010	0.048
10/ 9/1987	-0.1299	0.1263	-0.1305	0.1273	-0.014	0.059
10/26/1987	-0.1301	0.1264	-0.1302	0.1279	-0.017	0.055
11/16/1987	-0.1302	0.1266	-0.1297	0.1265	-0.021	0.077
11/30/1987	-0.1301	0.1262	-0.1302	0.1265	-0.015	0.071

SLOPE # 1 POSITION -6 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.2299	0.2283	0.1207	-0.1197	0.000	0.000
4/28/1987	-0.2298	0.2281	0.1205	-0.1218	0.003	0.022
4/30/1987	-0.2298	0.2288	0.1206	-0.1219	-0.005	0.024
5/ 5/1987	-0.2298	0.2281	0.1206	-0.1217	0.003	0.022
5/ 8/1987	-0.2298	0.2282	0.1207	-0.1218	0.002	0.024
5/12/1987	-0.2298	0.2280	0.1206	-0.1217	0.005	0.022
5/14/1987	-0.2297	0.2278	0.1204	-0.1213	0.008	0.015
5/19/1987	-0.2313	0.2271	0.1195	-0.1225	-0.002	0.018
5/21/1987	-0.2323	0.2295	0.1195	-0.1225	-0.041	0.018
5/26/1987	-0.2302	0.2270	0.1195	-0.1218	0.012	0.010
5/29/1987	-0.2301	0.2272	0.1196	-0.1219	0.010	0.013
6/ 2/1987	-0.2301	0.2272	0.1196	-0.1218	0.010	0.011
6/ 5/1987	-0.2302	0.2271	0.1195	-0.1219	0.010	0.011
6/ 9/1987	-0.2300	0.2299	0.1196	-0.1221	-0.020	0.015
6/16/1987	-0.2301	0.2309	0.1196	-0.1220	-0.032	0.014
6/23/1987	-0.2297	0.2269	0.1192	-0.1205	0.018	-0.008
6/25/1987	-0.2303	0.2267	0.1192	-0.1187	0.014	-0.029
6/30/1987	-0.2295	0.2264	0.1179	-0.1215	0.026	-0.011
7/ 3/1987	-0.2294	0.2264	0.1188	-0.1215	0.028	-0.001
7/10/1987	-0.2291	0.2261	0.1184	-0.1212	0.035	-0.009
7/14/1987	-0.2291	0.2260	0.1183	-0.1211	0.036	-0.011
7/16/1987	-0.2291	0.2260	0.1184	-0.1209	0.036	-0.013
7/23/1987	-0.2287	0.2271	0.1109	-0.1080	0.028	-0.247
7/29/1987	-0.2285	0.2259	0.1184	-0.1207	0.044	-0.015
8/12/1987	-0.2298	0.2270	0.1190	-0.1207	0.016	-0.008
8/18/1987	-0.2283	0.2258	0.1183	-0.1206	0.047	-0.017
9/ 1/1987	-0.2280	0.2304	0.1180	-0.1204	-0.002	-0.023
9/18/1987	-0.2279	0.2246	0.1176	-0.1205	0.066	-0.026
10/ 9/1987	-0.2276	0.2244	0.1173	-0.1203	0.071	-0.032
10/26/1987	-0.2274	0.2242	0.1172	-0.1202	0.076	-0.034
11/16/1987	-0.2275	0.2241	0.1170	-0.1204	0.076	-0.034
11/30/1987	-0.2274	0.2241	0.1170	-0.1201	0.077	-0.038

SLOPE # 1 POSITION -8 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0138	0.0126	-0.0132	0.0121	0.000	0.000
4/28/1987	-0.0138	0.0125	-0.0132	0.0118	0.001	0.003
4/30/1987	-0.0139	0.0127	-0.0132	0.0117	-0.002	0.005
5/ 5/1987	-0.0139	0.0127	-0.0129	0.0118	-0.002	0.007
5/ 8/1987	-0.0139	0.0125	-0.0127	0.0115	0.000	0.013
5/12/1987	-0.0140	0.0127	-0.0127	0.0115	-0.003	0.013
5/14/1987	-0.0150	0.0118	-0.0135	0.0106	-0.005	0.014
5/19/1987	-0.0150	0.0119	-0.0136	0.0106	-0.006	0.013
5/21/1987	-0.0151	0.0119	-0.0134	0.0105	-0.007	0.016
5/26/1987	-0.0150	0.0122	-0.0132	0.0104	-0.009	0.019
5/29/1987	-0.0150	0.0123	-0.0130	0.0106	-0.010	0.019
6/ 2/1987	-0.0150	0.0124	-0.0131	0.0105	-0.011	0.019
6/ 5/1987	-0.0150	0.0124	-0.0129	0.0104	-0.011	0.023
6/ 9/1987	-0.0149	0.0123	-0.0128	0.0103	-0.009	0.025
6/16/1987	-0.0151	0.0123	0.0128	-0.0105	-0.011	0.557
6/16/1987	-0.0151	0.0123	-0.0128	0.0105	-0.011	0.023
6/23/1987	-0.0151	0.0127	-0.0125	0.0101	-0.016	0.031
6/25/1987	-0.0152	0.0125	-0.0125	0.0101	-0.015	0.031
6/30/1987	-0.0153	0.0124	-0.0125	0.0096	-0.015	0.037
7/ 3/1987	-0.0152	0.0123	-0.0123	0.0098	-0.013	0.037
7/10/1987	-0.0154	0.0127	-0.0122	0.0096	-0.019	0.040
7/14/1987	-0.0156	0.0126	-0.0122	0.0095	-0.021	0.041
7/16/1987	-0.0155	0.0129	-0.0120	0.0096	-0.023	0.042
7/23/1987	-0.0159	0.0128	-0.0124	0.0095	-0.026	0.039
7/29/1987	-0.0155	0.0129	-0.0117	0.0094	-0.023	0.048
8/12/1987	-0.0155	0.0131	-0.0114	0.0091	-0.025	0.055
8/18/1987	-0.0156	0.0132	-0.0111	0.0089	-0.028	0.061
9/ 1/1987	-0.0167	0.0137	-0.0110	0.0087	-0.046	0.064
9/18/1987	-0.0171	0.0139	-0.0110	0.0081	-0.053	0.071
10/ 9/1987	-0.0177	0.0145	-0.0108	0.0078	-0.066	0.077
10/26/1987	-0.0181	0.0149	-0.0106	0.0077	-0.076	0.080
11/16/1987	-0.0187	0.0154	-0.0102	0.0071	-0.088	0.092
11/30/1987	-0.0188	0.0154	-0.0100	0.0070	-0.089	0.095

SLOPE # 1 POSITION -10 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.2797	0.2784	0.0642	-0.0640	0.000	0.000
4/28/1987	-0.2797	0.2781	0.0641	-0.0641	0.003	0.000
4/30/1987	-0.2805	0.2788	0.0642	-0.0642	-0.014	0.002
5/ 5/1987	-0.2795	0.2782	0.0640	-0.0641	0.005	-0.001
5/ 8/1987	-0.2795	0.2797	0.0643	-0.0641	-0.013	0.002
5/12/1987	-0.2802	0.2779	0.0642	-0.0641	0.000	0.001
5/14/1987	-0.2801	0.2768	0.0632	-0.0648	0.014	-0.002
5/19/1987	-0.2799	0.2768	0.0633	-0.0648	0.016	-0.001
5/21/1987	-0.2810	0.2772	0.0635	-0.0652	-0.001	0.006
5/26/1987	-0.2799	0.2774	0.0635	-0.0647	0.009	0.000
5/29/1987	-0.2798	0.2769	0.0636	-0.0648	0.016	0.002
6/ 2/1987	-0.2797	0.2770	0.0636	-0.0648	0.016	0.002
6/ 5/1987	-0.2797	0.2774	0.0636	-0.0639	0.012	-0.008
6/ 9/1987	-0.2797	0.2768	0.0636	-0.0647	0.018	0.001
6/16/1987	-0.2797	0.2767	0.0634	-0.0647	0.020	-0.001
6/23/1987	-0.2798	0.2775	0.0626	-0.0647	0.009	-0.010
6/25/1987	-0.2798	0.2768	0.0637	-0.0647	0.017	0.002
6/30/1987	-0.2796	0.2765	0.0631	-0.0649	0.023	-0.002
7/ 3/1987	-0.2794	0.2767	0.0634	-0.0647	0.023	-0.001
7/10/1987	-0.2795	0.2765	0.0634	-0.0648	0.024	0.000
7/14/1987	-0.2797	0.2768	0.0635	-0.0647	0.018	0.000
7/16/1987	-0.2793	0.2766	0.0635	-0.0647	0.025	0.000
7/23/1987	-0.2799	0.2766	0.0633	-0.0645	0.018	-0.005
7/29/1987	-0.2792	0.2764	0.0633	-0.0647	0.029	-0.002
8/12/1987	-0.2791	0.2764	0.0637	-0.0645	0.030	0.000
8/18/1987	-0.2791	0.2766	0.0635	-0.0644	0.028	-0.003
9/ 1/1987	-0.2791	0.2763	0.0636	-0.0643	0.031	-0.003
9/18/1987	-0.2794	0.2758	0.0571	-0.0648	0.033	-0.072
10/ 9/1987	-0.2793	0.2759	0.0604	-0.0647	0.033	-0.036
10/26/1987	-0.2792	0.2759	0.0632	-0.0643	0.035	-0.008
11/16/1987	-0.2793	0.2759	0.0626	-0.0632	0.033	-0.028
11/30/1987	-0.2793	0.2758	0.0619	-0.0643	0.035	-0.023

SLOPE # 1 POSITION -12 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.2126	0.2126	0.0625	-0.0633	0.000	0.000
4/28/1987	-0.2128	0.2113	0.0622	-0.0638	0.013	0.002
4/30/1987	-0.2126	0.2120	0.0627	-0.0636	0.007	0.006
5/ 5/1987	-0.2126	0.2116	0.0625	-0.0632	0.012	-0.001
5/ 8/1987	-0.2135	0.2116	0.0627	-0.0634	0.001	0.003
5/12/1987	-0.2125	0.2115	0.0625	-0.0632	0.014	-0.001
5/14/1987	-0.2133	0.2104	0.0615	-0.0639	0.017	-0.005
5/19/1987	-0.2132	0.2104	0.0615	-0.0640	0.018	-0.003
5/21/1987	-0.2146	0.2106	0.0616	-0.0630	0.000	-0.014
5/26/1987	-0.2132	0.2107	0.0633	-0.0638	0.015	0.015
5/29/1987	-0.2131	0.2109	0.0616	-0.0638	0.014	-0.005
6/ 2/1987	-0.2133	0.2109	0.0616	-0.0637	0.012	-0.006
6/ 5/1987	-0.2131	0.2122	0.0616	-0.0637	-0.001	-0.006
6/ 9/1987	-0.2131	0.2107	0.0615	-0.0636	0.016	-0.008
6/16/1987	-0.2158	0.2112	0.0612	-0.0636	-0.021	-0.011
6/23/1987	-0.2133	0.2107	0.0610	-0.0633	0.014	-0.017
6/25/1987	-0.2136	0.2107	0.0611	-0.0635	0.010	-0.014
6/30/1987	-0.2158	0.2103	0.0606	-0.0635	-0.010	-0.019
7/ 3/1987	-0.2132	0.2107	0.0608	-0.0632	0.015	-0.021
7/10/1987	-0.2132	0.2107	0.0607	-0.0632	0.015	-0.022
7/14/1987	-0.2136	0.2103	0.0605	-0.0633	0.015	-0.023
7/16/1987	-0.2132	0.2110	0.0609	-0.0626	0.012	-0.026
7/23/1987	-0.2134	0.2105	0.0609	-0.0618	0.015	-0.036
7/29/1987	-0.2130	0.2110	0.0608	-0.0628	0.014	-0.025
8/12/1987	-0.2132	0.2109	0.0605	-0.0626	0.013	-0.031
8/18/1987	-0.2132	0.2108	0.0608	-0.0626	0.014	-0.028
9/ 1/1987	-0.2135	0.2102	0.0604	-0.0611	0.017	-0.049
9/18/1987	-0.2133	0.2106	0.0601	-0.0827	0.015	0.195
10/ 9/1987	-0.2136	0.2108	0.0583	-0.0627	0.009	-0.055
10/26/1987	-0.2154	0.2108	0.0600	-0.0626	-0.012	-0.037
11/16/1987	-0.2138	0.2109	0.0597	-0.0627	0.006	-0.039
11/30/1987	-0.2138	0.2107	0.0596	-0.0617	0.008	-0.052

SLOPE # 1 POSITION -14 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1239	0.1226	-0.0114	0.0102	0.000	0.000
4/28/1987	-0.1239	0.1228	-0.0115	0.0102	-0.002	-0.001
4/30/1987	-0.1239	0.1228	-0.0114	0.0107	-0.002	-0.006
5/ 5/1987	-0.1239	0.1228	-0.0114	0.0102	-0.002	0.000
5/ 8/1987	-0.1239	0.1229	-0.0114	0.0103	-0.003	-0.001
5/12/1987	-0.1238	0.1228	-0.0122	0.0102	-0.001	-0.009
5/14/1987	-0.1247	0.1218	-0.0123	0.0095	0.000	-0.002
5/19/1987	-0.1247	0.1218	-0.0122	0.0106	0.000	-0.014
5/21/1987	-0.1247	0.1219	-0.0123	0.0094	-0.001	-0.001
5/26/1987	-0.1246	0.1220	-0.0121	0.0097	-0.001	-0.002
5/29/1987	-0.1248	0.1220	-0.0121	0.0097	-0.003	-0.002
6/ 2/1987	-0.1246	0.1220	-0.0122	0.0097	-0.001	-0.003
6/ 5/1987	-0.1247	0.1218	-0.0123	0.0097	0.000	-0.005
6/ 9/1987	-0.1245	0.1217	-0.0132	0.0099	0.003	-0.017
6/16/1987	-0.1247	0.1219	-0.0125	0.0116	-0.001	-0.029
6/23/1987	-0.1246	0.1218	-0.0127	0.0102	0.001	-0.015
6/25/1987	-0.1247	0.1218	-0.0128	0.0101	0.000	-0.015
6/30/1987	-0.1247	0.1217	-0.0129	0.0149	0.001	-0.071
7/ 3/1987	-0.1248	0.1218	-0.0127	0.0104	-0.001	-0.017
7/10/1987	-0.1251	0.1217	-0.0133	0.0104	-0.003	-0.024
7/14/1987	-0.1248	0.1219	-0.0130	0.0105	-0.002	-0.022
7/16/1987	-0.1246	0.1220	-0.0127	0.0105	-0.001	-0.018
7/23/1987	-0.1247	0.1219	-0.0130	0.0155	-0.001	-0.079
7/29/1987	-0.1247	0.1218	-0.0130	0.0110	0.000	-0.028
8/12/1987	-0.1247	0.1219	-0.0139	0.0110	-0.001	-0.038
8/18/1987	-0.1246	0.1221	-0.0131	0.0112	-0.002	-0.031
9/ 1/1987	-0.1248	0.1220	-0.0132	0.0111	-0.003	-0.031
9/18/1987	-0.1252	0.1216	-0.0138	0.0103	-0.003	-0.029
10/ 9/1987	-0.1252	0.1216	-0.0138	0.0124	-0.003	-0.053
10/26/1987	-0.1253	0.1215	-0.0136	0.0111	-0.003	-0.036
11/16/1987	-0.1251	0.1214	-0.0137	0.0111	0.000	-0.037
11/30/1987	-0.1252	0.1214	-0.0137	0.0111	-0.001	-0.037

SLOPE # 1 POSITION -16 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1154	0.1146	0.0161	-0.0172	0.000	0.000
4/28/1987	-0.1154	0.1141	0.0160	-0.0173	0.006	0.000
4/30/1987	-0.1160	0.1141	0.0160	-0.0155	-0.001	-0.021
5/ 5/1987	-0.1154	0.1141	0.0160	-0.0172	0.006	-0.001
5/ 8/1987	-0.1154	0.1143	0.0162	-0.0172	0.003	0.001
5/12/1987	-0.1153	0.1142	0.0160	-0.0172	0.006	-0.001
5/14/1987	-0.1160	0.1133	0.0152	-0.0180	0.008	-0.001
5/19/1987	-0.1163	0.1134	0.0151	-0.0180	0.003	-0.002
5/21/1987	-0.1171	0.1132	0.0150	-0.0174	-0.003	-0.010
5/26/1987	-0.1161	0.1134	0.0152	-0.0175	0.006	-0.007
5/29/1987	-0.1159	0.1133	0.0152	-0.0179	0.009	-0.002
6/ 5/1987	-0.1160	0.1133	0.0119	-0.0175	0.008	-0.045
6/ 9/1987	-0.1159	0.1134	0.0141	-0.0176	0.008	-0.018
6/16/1987	-0.1161	0.1134	0.0135	-0.0161	0.006	-0.042
6/23/1987	-0.1159	0.1134	0.0147	-0.0168	0.008	-0.021
6/25/1987	-0.1162	0.1136	0.0145	-0.0166	0.002	-0.025
6/30/1987	-0.1161	0.1132	0.0134	-0.0132	0.008	-0.077
7/ 3/1987	-0.1164	0.1135	0.0143	-0.0169	0.001	-0.024
7/10/1987	-0.1168	0.1131	0.0142	-0.0171	0.001	-0.023
7/14/1987	-0.1166	0.1135	0.0141	-0.0169	-0.001	-0.026
7/16/1987	-0.1161	0.1136	0.0143	-0.0168	0.003	-0.025
7/23/1987	-0.1161	0.1132	0.0140	-0.0168	0.008	-0.029
7/29/1987	-0.1164	0.1135	0.0141	-0.0165	0.001	-0.031
8/12/1987	-0.1161	0.1134	0.0139	-0.0165	0.006	-0.033
8/18/1987	-0.1160	0.1137	0.0140	-0.0163	0.003	-0.034
9/ 1/1987	-0.1161	0.1135	0.0136	-0.0157	0.005	-0.046
9/18/1987	-0.1168	0.1132	0.0134	-0.0167	0.000	-0.037
10/ 9/1987	-0.1165	0.1131	0.0120	-0.0145	0.005	-0.078
10/26/1987	-0.1165	0.1132	0.0133	-0.0164	0.003	-0.041
11/16/1987	-0.1168	0.1131	0.0132	-0.0166	0.001	-0.040
11/30/1987	-0.1167	0.1134	0.0132	-0.0167	-0.001	-0.039

SLOPE # 1 POSITION -18 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0589	0.0578	-0.0534	0.0522	0.000	0.000
4/28/1987	-0.0591	0.0576	-0.0533	0.0520	0.000	0.003
4/30/1987	-0.0590	0.0576	-0.0536	0.0522	0.001	-0.002
5/ 5/1987	-0.0588	0.0576	-0.0536	0.0522	0.003	-0.002
5/ 8/1987	-0.0588	0.0578	-0.0533	0.0520	0.001	0.003
5/12/1987	-0.0589	0.0575	-0.0533	0.0523	0.003	0.000
5/14/1987	-0.0577	0.0567	-0.0544	0.0516	0.026	-0.005
5/19/1987	-0.0595	0.0566	-0.0544	0.0517	0.007	-0.006
5/21/1987	-0.0595	0.0566	-0.0544	0.0515	0.007	-0.003
5/26/1987	-0.0595	0.0567	-0.0542	0.0517	0.006	-0.003
5/29/1987	-0.0594	0.0568	-0.0543	0.0518	0.006	-0.006
6/ 2/1987	-0.0594	0.0568	-0.0547	0.0521	0.006	-0.014
6/ 5/1987	-0.0594	0.0568	-0.0546	0.0520	0.006	-0.011
6/ 9/1987	-0.0594	0.0566	-0.0547	0.0528	0.008	-0.022
6/16/1987	-0.0593	0.0567	-0.0560	0.0524	0.008	-0.032
6/23/1987	-0.0592	0.0568	-0.0550	0.0526	0.008	-0.023
6/25/1987	-0.0592	0.0568	-0.0550	0.0526	0.008	-0.023
6/30/1987	-0.0594	0.0566	-0.0554	0.0527	0.008	-0.029
7/ 3/1987	-0.0591	0.0568	-0.0553	0.0529	0.009	-0.030
7/10/1987	-0.0592	0.0566	-0.0556	0.0530	0.010	-0.034
7/14/1987	-0.0593	0.0563	-0.0556	0.0531	0.013	-0.036
7/16/1987	-0.0591	0.0568	0.0571	-0.0533	0.009	2.475
7/16/1987	-0.0591	0.0568	-0.0571	0.0533	0.009	-0.055
7/23/1987	-0.0589	0.0566	-0.0560	0.0537	0.014	-0.047
7/29/1987	-0.0588	0.0581	-0.0560	0.0539	-0.002	-0.049
8/12/1987	-0.0590	0.0567	-0.0562	0.0540	0.011	-0.053
8/18/1987	-0.0587	0.0568	-0.0563	0.0543	0.014	-0.057
9/ 1/1987	-0.0590	0.0568	-0.0568	0.0545	0.010	-0.065
9/18/1987	-0.0594	0.0563	-0.0574	0.0545	0.011	-0.072
10/ 9/1987	-0.0589	0.0565	-0.0574	0.0548	0.015	-0.076
10/26/1987	-0.0593	0.0564	-0.0577	0.0547	0.011	-0.078
11/16/1987	-0.0594	0.0562	-0.0582	0.0548	0.013	-0.085
11/30/1987	-0.0593	0.0564	-0.0580	0.0550	0.011	-0.085

SLOPE # 2 POSITION 22 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.0405	-0.0419	-0.0013	0.0002	0.000	0.000
4/28/1987	0.0405	-0.0422	-0.0014	0.0000	0.003	0.001
4/30/1987	0.0405	-0.0420	-0.0014	0.0001	0.001	0.000
5/ 5/1987	0.0407	-0.0417	-0.0013	0.0003	0.000	-0.001
5/ 8/1987	0.0408	-0.0424	-0.0011	0.0002	0.009	0.002
5/12/1987	0.0405	-0.0420	-0.0014	0.0002	0.001	-0.001
5/14/1987	0.0398	-0.0437	-0.0024	0.0006	0.013	-0.017
5/19/1987	0.0399	-0.0429	-0.0023	-0.0005	0.005	-0.003
5/21/1987	0.0400	-0.0431	-0.0023	-0.0005	0.008	-0.003
5/26/1987	0.0403	-0.0429	-0.0021	-0.0003	0.009	-0.003
5/29/1987	0.0407	-0.0428	-0.0023	-0.0004	0.013	-0.005
6/ 2/1987	0.0400	-0.0425	-0.0021	-0.0004	0.001	-0.002
6/ 5/1987	0.0401	-0.0427	-0.0022	-0.0005	0.005	-0.002
6/ 9/1987	0.0400	-0.0425	-0.0022	-0.0004	0.001	-0.003
6/16/1987	0.0399	-0.0423	-0.0020	-0.0001	-0.002	-0.005
6/23/1987	0.0403	-0.0424	-0.0018	-0.0003	0.003	0.000
6/25/1987	0.0395	-0.0418	-0.0023	-0.0002	-0.013	-0.007
7/ 3/1987	0.0394	-0.0420	-0.0024	-0.0004	-0.011	-0.006
7/10/1987	0.0393	-0.0419	0.0028	-0.0002	-0.014	0.052
7/10/1987	0.0393	-0.0419	-0.0028	0.0002	-0.014	-0.017
7/16/1987	0.0391	-0.0416	-0.0029	0.0002	-0.019	-0.018
7/23/1987	0.0382	-0.0413	-0.0030	0.0004	-0.033	-0.022
7/29/1987	0.0382	-0.0420	-0.0041	0.0001	-0.025	-0.031
8/12/1987	0.0385	-0.0417	-0.0037	0.0005	-0.025	-0.031
8/18/1987	0.0391	-0.0411	-0.0034	0.0010	-0.025	-0.033
9/ 1/1987	0.0380	-0.0407	-0.0040	0.0012	-0.042	-0.042
9/18/1987	0.0365	-0.0412	-0.0047	0.0007	-0.054	-0.045
10/26/1987	0.0368	-0.0403	-0.0049	0.0009	-0.061	-0.049
11/16/1987	0.0364	-0.0406	-0.0056	0.0020	-0.062	-0.070
11/30/1987	0.0371	-0.0403	-0.0053	0.0020	-0.057	-0.066
10/ 4/1988	0.0362	-0.0398	-0.0063	0.0037	-0.073	-0.097

SLOPE # 2 POSITION 20 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.0031	-0.0045	0.0429	-0.0443	0.000	0.000
4/28/1987	0.0028	-0.0046	0.0427	-0.0443	-0.002	-0.002
4/30/1987	0.0026	-0.0045	0.0435	-0.0442	-0.006	0.006
5/ 5/1987	0.0031	-0.0045	0.0431	-0.0441	0.000	0.000
5/ 8/1987	0.0031	-0.0046	0.0428	-0.0444	0.001	0.000
5/12/1987	0.0027	-0.0023	0.0429	-0.0441	-0.030	-0.002
5/14/1987	0.0021	-0.0056	0.0418	-0.0457	0.001	0.003
5/19/1987	0.0021	-0.0054	0.0418	-0.0448	-0.001	-0.007
5/21/1987	0.0022	-0.0054	0.0413	-0.0454	0.000	-0.006
5/26/1987	0.0023	-0.0053	0.0420	-0.0447	0.000	-0.006
5/29/1987	0.0022	-0.0041	0.0419	-0.0447	-0.015	-0.007
6/ 5/1987	0.0019	-0.0050	0.0409	-0.0447	-0.008	-0.018
6/ 9/1987	0.0024	-0.0057	0.0420	-0.0447	0.006	-0.006
6/16/1987	0.0025	-0.0054	0.0419	-0.0448	0.003	-0.006
6/23/1987	0.0028	-0.0056	0.0423	-0.0441	0.009	-0.009
6/25/1987	0.0021	-0.0053	0.0419	-0.0446	-0.002	-0.008
7/ 3/1987	0.0020	-0.0055	0.0417	-0.0447	-0.001	-0.009
7/10/1987	0.0023	-0.0055	0.0418	-0.0446	0.002	-0.009
7/16/1987	0.0023	-0.0054	0.0419	-0.0446	0.001	-0.008
7/23/1987	0.0023	-0.0050	0.0419	-0.0453	-0.003	0.000
7/29/1987	0.0015	-0.0056	0.0418	-0.0449	-0.006	-0.006
8/12/1987	0.0018	-0.0056	0.0418	-0.0447	-0.002	-0.008
8/18/1987	0.0024	-0.0052	0.0420	-0.0445	0.000	-0.008
9/ 1/1987	0.0026	-0.0058	0.0413	-0.0442	0.009	-0.019
9/18/1987	0.0012	-0.0064	0.0398	0.0443	0.000	-1.051
10/26/1987	0.0027	-0.0064	0.0401	-0.0441	0.017	-0.034
11/16/1987	0.0022	-0.0064	0.0397	-0.0437	0.011	-0.044
11/30/1987	0.0025	-0.0063	0.0401	-0.0435	0.014	-0.041

SLOPE # 2 POSITION 18 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0822	0.0810	-0.0253	0.0237	0.000	0.000
4/28/1987	-0.0820	0.0807	-0.0257	0.0237	0.006	-0.005
4/30/1987	-0.0821	0.0808	-0.0253	0.0239	0.003	-0.002
5/ 5/1987	-0.0820	0.0810	-0.0250	0.0237	0.002	0.003
5/ 8/1987	-0.0821	0.0810	-0.0238	0.0241	0.001	0.013
5/12/1987	-0.0813	0.0811	-0.0251	0.0237	0.009	0.002
5/14/1987	-0.0831	0.0803	-0.0260	0.0227	-0.002	0.003
5/19/1987	-0.0830	0.0801	-0.0259	0.0227	0.001	0.005
5/21/1987	-0.0829	0.0795	-0.0259	0.0227	0.009	0.005
5/26/1987	-0.0821	0.0802	-0.0260	0.0240	0.010	-0.011
5/29/1987	-0.0831	0.0804	-0.0257	0.0227	-0.003	0.007
6/ 2/1987	-0.0831	0.0806	-0.0256	0.0227	-0.006	0.008
6/ 5/1987	-0.0831	0.0805	-0.0268	0.0229	-0.005	-0.008
6/ 9/1987	-0.0832	0.0806	-0.0257	0.0227	-0.007	0.007
6/16/1987	-0.0835	0.0807	-0.0264	0.0227	-0.011	-0.001
6/23/1987	-0.0835	0.0806	-0.0250	0.0225	-0.010	0.017
6/25/1987	-0.0831	0.0808	-0.0256	0.0225	-0.008	0.010
7/ 3/1987	-0.0838	0.0809	-0.0256	0.0225	-0.017	0.010
7/10/1987	-0.0839	0.0809	-0.0255	0.0223	-0.018	0.014
7/16/1987	-0.0840	0.0812	0.0255	-0.0224	-0.023	1.110
7/16/1987	-0.0840	0.0812	-0.0255	0.0224	-0.023	0.013
7/23/1987	-0.0842	0.0814	-0.0257	0.0225	-0.028	0.009
7/29/1987	-0.0841	0.0810	-0.0254	0.0221	-0.022	0.017
8/12/1987	-0.0844	0.0816	-0.0261	0.0236	-0.032	-0.008
8/18/1987	-0.0845	0.0820	-0.0252	0.0223	-0.038	0.017
9/ 1/1987	-0.0854	0.0825	-0.0253	0.0224	-0.054	0.015
9/18/1987	-0.0864	0.0827	-0.0280	0.0215	-0.068	-0.006
10/26/1987	-0.0869	0.0834	-0.0258	0.0221	-0.081	0.013
11/16/1987	-0.0807	0.0835	-0.0255	0.0219	-0.011	0.018
11/30/1987	-0.0867	0.0832	-0.0255	0.0218	-0.077	0.019
10/ 4/1988	-0.0864	0.0831	-0.0264	0.0227	-0.072	-0.001

SLOPE # 2 POSITION 16 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0429	0.0414	0.0660	-0.0670	0.000	0.000
4/28/1987	-0.0428	0.0425	0.0655	-0.0670	-0.011	-0.006
4/30/1987	-0.0429	0.0413	0.0658	-0.0669	0.001	-0.003
5/ 5/1987	-0.0427	0.0414	0.0660	-0.0669	0.002	-0.001
5/ 8/1987	-0.0430	0.0420	0.0660	-0.0668	-0.008	-0.002
5/12/1987	-0.0428	0.0415	0.0659	-0.0668	0.000	-0.003
5/14/1987	-0.0461	0.0430	0.0649	-0.0664	-0.055	-0.019
5/19/1987	-0.0441	0.0459	0.0627	-0.0676	-0.065	-0.031
5/21/1987	-0.0439	0.0408	0.0649	-0.0676	-0.005	-0.006
5/26/1987	-0.0439	0.0412	0.0651	-0.0675	-0.009	-0.005
5/29/1987	-0.0437	0.0409	0.0649	-0.0672	-0.003	-0.010
6/ 2/1987	-0.0437	0.0410	0.0650	-0.0674	-0.005	-0.007
6/ 5/1987	-0.0436	0.0409	0.0648	-0.0673	-0.002	-0.010
6/ 9/1987	-0.0440	0.0412	0.0648	-0.0672	-0.010	-0.011
6/16/1987	-0.0459	0.0412	0.0640	-0.0671	-0.032	-0.022
6/23/1987	-0.0450	0.0415	0.0635	-0.0671	-0.025	-0.028
6/25/1987	-0.0444	0.0417	0.0644	-0.0671	-0.021	-0.017
7/ 3/1987	-0.0449	0.0419	0.0644	-0.0670	-0.029	-0.018
7/10/1987	-0.0452	0.0423	0.0645	-0.0671	-0.037	-0.016
7/16/1987	-0.0454	0.0427	0.0645	-0.0668	-0.044	-0.019
7/23/1987	-0.0456	0.0450	0.0644	-0.0667	-0.072	-0.022
7/29/1987	-0.0454	0.0425	0.0645	-0.0667	-0.041	-0.021
8/12/1987	-0.0458	0.0431	0.0639	-0.0666	-0.053	-0.029
8/18/1987	-0.0459	0.0434	0.0645	-0.0664	-0.057	-0.024
9/ 1/1987	-0.0465	0.0439	0.0642	-0.0664	-0.070	-0.028
9/18/1987	-0.0472	0.0440	0.0644	-0.0668	-0.079	-0.021
10/26/1987	-0.0477	0.0444	0.0640	-0.0667	-0.089	-0.026
11/16/1987	-0.0481	0.0445	0.0637	-0.0671	-0.095	-0.025
11/30/1987	-0.0480	0.0448	0.0643	-0.0669	-0.097	-0.021
10/ 4/1988	-0.0523	0.0489	0.0630	-0.0665	-0.194	-1.484

SLOPE # 2 POSITION 14 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0790	0.0778	0.1024	-0.1035	0.000	0.000
4/28/1987	-0.0792	0.0774	0.1023	-0.1037	0.002	0.001
4/30/1987	-0.0788	0.0775	0.1023	-0.1037	0.006	0.001
5/ 5/1987	-0.0789	0.0777	0.1022	-0.1034	0.002	-0.003
5/ 8/1987	-0.0787	0.0776	0.1026	-0.1036	0.006	0.003
5/12/1987	-0.0786	0.0809	0.1024	-0.1030	-0.031	-0.006
5/14/1987	-0.0794	0.0768	0.1012	-0.1046	0.007	-0.001
5/19/1987	-0.0797	0.0765	0.1014	-0.1031	0.007	-0.016
5/21/1987	-0.0784	0.0800	0.1015	-0.1044	-0.018	0.000
5/26/1987	-0.0793	0.0808	0.1017	-0.1042	-0.038	0.000
5/29/1987	-0.0806	0.0765	0.1016	-0.1043	-0.003	0.000
6/ 2/1987	-0.0793	0.0768	0.1018	-0.1043	0.008	0.002
6/ 5/1987	-0.0793	0.0764	0.1019	-0.1045	0.013	0.006
6/ 9/1987	-0.0793	0.0793	0.1019	-0.1021	-0.021	-0.022
6/16/1987	-0.0807	0.0783	0.1019	-0.1048	-0.025	0.009
6/23/1987	-0.0790	0.0760	0.1023	-0.1049	0.021	0.015
6/25/1987	-0.0786	0.0758	0.1027	-0.1052	0.028	0.023
7/ 3/1987	-0.0788	0.0752	0.1027	-0.1057	0.032	0.029
7/10/1987	-0.0780	0.0751	0.1031	-0.1059	0.042	0.036
7/16/1987	-0.0779	0.0745	0.1032	-0.1060	0.050	0.038
7/23/1987	-0.0775	0.0761	0.1035	-0.1048	0.037	0.028
7/29/1987	-0.0775	0.0744	0.1030	-0.1075	0.056	0.053
8/12/1987	-0.0774	0.0747	0.1040	-0.1064	0.054	0.052
8/18/1987	-0.0771	0.0745	0.1040	-0.1063	0.060	0.050
9/ 1/1987	-0.0771	0.0741	0.1038	-0.1064	0.064	0.047
9/18/1987	-0.0772	0.0741	0.1038	-0.1069	0.063	0.055
10/26/1987	-0.0772	0.0740	0.1034	-0.1066	0.064	0.047
11/16/1987	-0.0773	0.0736	0.1029	-0.1065	0.068	0.040
11/30/1987	-0.0772	0.0742	0.1032	-0.1064	0.062	0.042
10/ 4/1988	-0.0753	0.0716	0.1002	-0.1057	0.113	0.000

SLOPE # 2 POSITION 12 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0283	0.0273	0.0422	-0.0435	0.000	0.000
4/28/1987	-0.0284	0.0270	0.0419	-0.0435	0.002	-0.003
4/30/1987	-0.0284	0.0271	0.0420	-0.0435	0.001	-0.002
5/ 5/1987	-0.0283	0.0273	0.0421	-0.0434	0.000	-0.002
5/ 8/1987	-0.0283	0.0278	0.0420	-0.0433	-0.006	-0.005
5/12/1987	-0.0283	0.0293	0.0417	-0.0433	-0.023	-0.008
5/14/1987	-0.0292	0.0267	0.0408	-0.0440	-0.003	-0.010
5/19/1987	-0.0294	0.0270	0.0407	-0.0441	-0.009	-0.010
5/21/1987	-0.0293	0.0276	0.0409	-0.0439	-0.015	-0.010
5/26/1987	-0.0291	0.0269	0.0411	-0.0437	-0.005	-0.010
5/29/1987	-0.0292	0.0267	0.0409	-0.0433	-0.003	-0.017
6/ 2/1987	-0.0292	0.0269	0.0410	-0.0438	-0.006	-0.010
6/ 5/1987	-0.0294	0.0269	0.0408	-0.0437	-0.008	-0.014
6/ 9/1987	-0.0293	0.0270	0.0410	-0.0436	-0.008	-0.013
6/16/1987	-0.0293	0.0270	0.0408	-0.0434	-0.008	-0.017
6/23/1987	-0.0293	0.0268	0.0405	-0.0436	-0.006	-0.018
6/25/1987	-0.0293	0.0270	0.0409	-0.0472	-0.008	0.028
7/ 3/1987	-0.0296	0.0270	0.0406	-0.0434	-0.011	-0.019
7/10/1987	-0.0301	0.0270	0.0405	-0.0433	-0.017	-0.022
7/16/1987	-0.0296	0.0266	-0.0402	-0.0432	-0.007	-0.948
7/23/1987	-0.0293	0.0270	0.0404	-0.0432	-0.008	-0.024
8/12/1987	-0.0292	0.0272	0.0404	-0.0428	-0.009	-0.029
8/18/1987	-0.0291	0.0269	0.0401	-0.0427	-0.005	-0.033
9/ 1/1987	-0.0294	0.0268	0.0398	-0.0428	-0.007	-0.036
9/18/1987	-0.0295	0.0266	0.0394	-0.0425	-0.006	-0.044
10/26/1987	-0.0295	0.0266	0.0392	-0.0425	-0.006	-0.046
11/16/1987	-0.0295	0.0267	0.0391	-0.0426	-0.007	-0.046
11/30/1987	-0.0294	0.0265	0.0392	-0.0424	-0.003	-0.047
10/ 4/1988	-0.0290	0.0258	0.0369	-0.0404	0.009	-0.096

SLOPE # 2 POSITION 10 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.0749	-0.0764	-0.1044	0.1032	0.000	0.000
4/28/1987	0.0751	-0.0767	-0.1045	0.1031	0.006	0.000
4/30/1987	0.0746	-0.0759	-0.1049	0.1027	-0.009	0.000
5/ 5/1987	0.0747	-0.0763	-0.1048	0.1040	-0.001	-0.014
5/ 8/1987	0.0748	-0.0759	-0.1050	0.1040	-0.007	-0.016
5/12/1987	0.0751	-0.0762	-0.1047	0.1039	0.000	-0.011
5/14/1987	0.0736	-0.0770	-0.1060	0.1030	-0.008	-0.016
5/19/1987	0.0735	-0.0767	-0.1051	0.1031	-0.013	-0.007
5/21/1987	0.0740	-0.0774	-0.1047	0.1018	0.001	0.013
5/26/1987	0.0740	-0.0761	-0.1046	0.1033	-0.014	-0.003
5/29/1987	0.0739	-0.0768	-0.1058	0.1031	-0.007	-0.015
6/ 2/1987	0.0740	-0.0766	-0.0987	0.1033	-0.008	0.064
6/ 5/1987	0.0739	-0.0778	-0.1055	0.1033	0.005	-0.014
6/ 9/1987	0.0739	-0.0766	-0.1058	0.1033	-0.009	-0.017
6/16/1987	0.0746	-0.0799	-0.1084	0.1057	0.037	-0.075
6/23/1987	0.0734	-0.0760	-0.1059	0.1034	-0.022	-0.019
6/25/1987	0.0782	-0.0808	-0.1039	0.1018	0.088	0.022
7/ 3/1987	0.0751	-0.0787	-0.1048	0.1018	0.029	0.011
7/10/1987	0.0757	-0.0793	-0.1046	0.1021	0.042	0.010
7/16/1987	0.0753	-0.0786	-0.1046	0.1021	0.030	0.010
7/23/1987	0.0755	-0.0786	-0.1049	0.1022	0.032	0.006
7/29/1987	-0.2255	0.2232	0.1063	-0.1087	-6.883	4.844
7/29/1987	0.0756	-0.0790	-0.1045	0.1018	0.038	0.015
8/12/1987	0.0759	-0.0785	-0.1043	0.1022	0.036	0.013
8/18/1987	0.0755	-0.0784	-0.1042	0.1021	0.030	0.015
9/ 1/1987	0.0744	-0.0786	-0.1011	0.0979	0.019	0.099
9/18/1987	0.0765	-0.0783	-0.1008	-0.0976	0.040	2.343
10/26/1987	0.0747	-0.0783	-0.1005	0.0960	0.019	0.127
11/16/1987	0.0753	-0.0794	-0.1004	0.0970	0.039	0.117
11/30/1987	0.0752	-0.0788	-0.1000	0.0979	0.031	0.111

SLOPE # 2 POSITION 8 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.1275	-0.1275	0.2114	-0.2127	0.000	0.000
4/28/1987	0.1275	-0.1275	0.2115	-0.2127	0.000	0.001
4/30/1987	0.1275	-0.1267	0.2140	-0.2126	-0.009	0.029
5/ 5/1987	0.1278	-0.1263	0.2114	-0.2126	-0.010	-0.001
5/ 5/1987	0.1277	-0.1276	0.2114	-0.2125	0.003	-0.002
5/12/1987	0.1279	-0.1259	0.2123	-0.2124	-0.014	0.007
5/14/1987	0.1267	-0.1276	0.2102	-0.2134	-0.008	-0.006
5/19/1987	0.1268	-0.1282	0.2180	-0.2146	0.000	0.098
5/21/1987	0.1269	-0.1253	0.2134	-0.2132	-0.032	0.029
5/26/1987	0.1272	-0.1283	0.2106	-0.2124	0.006	-0.013
5/29/1987	0.1272	-0.1278	0.2106	-0.2131	0.000	-0.005
6/ 2/1987	0.1273	-0.1272	0.2106	-0.2131	-0.006	-0.005
6/ 5/1987	0.1273	-0.1243	0.2109	-0.2131	-0.039	-0.001
6/ 9/1987	0.1273	-0.1286	0.2104	-0.2130	0.010	-0.008
6/16/1987	0.1275	-0.1267	0.2103	-0.2130	-0.009	-0.009
6/23/1987	0.1274	-0.1281	0.2114	-0.2130	0.006	0.003
6/25/1987	0.1278	-0.1291	0.2105	-0.2133	0.022	-0.003
7/ 3/1987	0.1276	-0.1293	0.2100	-0.2128	0.022	-0.015
7/10/1987	0.1278	-0.1293	0.2101	-0.2129	0.024	-0.013
7/16/1987	0.1256	-0.1294	0.2101	-0.2127	0.000	-0.015
7/23/1987	0.1278	-0.1259	0.2110	-0.2126	-0.015	-0.006
7/29/1987	0.1279	-0.1292	0.2108	-0.2124	0.024	-0.010
8/12/1987	0.1279	-0.1292	0.2099	-0.2124	0.024	-0.021
8/18/1987	0.1281	-0.1295	0.2098	-0.2123	0.030	-0.023
9/ 1/1987	0.1280	-0.1295	0.2102	-0.2124	0.029	-0.017
9/18/1987	0.1278	-0.1279	0.2094	-0.2125	0.008	-0.025
10/26/1987	0.1275	-0.1298	0.2091	-0.2123	0.026	-0.031
11/16/1987	0.1273	-0.1298	0.2089	-0.2123	0.024	-0.033
11/30/1987	0.1274	-0.1297	0.2089	-0.2123	0.024	-0.033
10/ 4/1988	0.1279	-0.1338	0.2169	-0.2122	0.077	0.058

SLOPE # 2 POSITION 6 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.2001	0.1991	0.0582	-0.0589	0.000	0.000
4/28/1987	-0.2001	0.1987	0.0577	-0.0578	0.005	-0.018
4/30/1987	-0.2002	0.1987	0.0576	-0.0580	0.003	-0.017
5/ 5/1987	-0.2001	0.1989	0.0576	-0.0585	0.002	-0.011
5/ 8/1987	-0.2007	0.1989	0.0577	-0.0584	-0.005	-0.011
5/12/1987	-0.2004	0.1990	0.0575	-0.0573	-0.002	-0.026
5/14/1987	-0.2012	0.1987	0.0564	-0.0591	-0.008	-0.018
5/19/1987	-0.2013	0.2012	0.0557	-0.0590	-0.038	-0.028
5/21/1987	-0.2011	0.2011	0.0564	-0.0586	-0.034	-0.024
5/26/1987	-0.2013	0.1981	0.0565	-0.0568	-0.002	-0.044
5/29/1987	-0.2014	0.1986	0.0559	-0.0588	-0.009	-0.028
6/ 2/1987	-0.2013	0.1986	0.0563	-0.0572	-0.008	-0.041
6/ 5/1987	-0.2013	0.1989	0.0563	-0.0587	-0.011	-0.024
6/ 9/1987	-0.2018	0.2004	0.0562	-0.0579	-0.034	-0.034
6/16/1987	-0.2013	0.1988	0.0561	-0.0578	-0.010	-0.037
7/ 3/1987	-0.2316	0.2287	0.0875	-0.0905	-0.703	0.698
7/10/1987	-0.2315	0.2288	0.0876	-0.0906	-0.703	0.700
7/16/1987	-0.2316	0.2294	0.0877	-0.0906	-0.711	0.702
7/23/1987	-0.2315	0.2354	0.0878	-0.0906	-0.779	0.703
7/29/1987	-0.2315	0.2293	0.0879	-0.0906	-0.709	0.704
8/12/1987	-0.2318	0.2293	0.0880	-0.0906	-0.712	0.705
8/18/1987	-0.2316	0.2293	0.0880	-0.0907	-0.710	0.706
9/ 1/1987	-0.2318	0.2293	0.0879	-0.0908	-0.712	0.706
9/18/1987	-0.2322	0.2291	0.0945	-0.0912	-0.714	0.786
10/26/1987	-0.2327	0.2294	0.0878	-0.0911	-0.723	0.708
11/16/1987	-0.2324	0.2291	0.0878	-0.0912	-0.717	0.710
11/30/1987	-0.2322	0.2290	0.0876	-0.0913	-0.713	0.708
10/ 4/1988	-0.2377	0.2296	0.0835	-0.0873	-0.783	0.616

SLOPE # 2 POSITION 4 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.0625	-0.0638	-0.1090	0.1078	0.000	0.000
4/28/1987	0.0624	-0.0637	-0.1088	0.1075	-0.002	0.006
4/30/1987	0.0624	-0.0637	-0.1092	0.1077	-0.002	-0.001
5/ 5/1987	0.0629	-0.0636	-0.1090	0.1077	0.002	0.001
5/ 8/1987	0.0624	-0.0635	-0.1090	0.1078	-0.005	0.000
5/12/1987	0.0624	-0.0635	-0.1090	0.1077	-0.005	0.001
5/14/1987	0.0615	-0.0645	-0.1100	0.1067	-0.003	0.001
5/19/1987	0.0615	-0.0643	-0.1100	0.1064	-0.006	0.005
5/21/1987	0.0616	-0.0644	-0.1098	0.1070	-0.003	0.000
5/26/1987	0.0617	-0.0642	-0.1097	0.1075	-0.005	-0.005
5/29/1987	0.0613	-0.0642	-0.1098	0.1069	-0.009	0.001
6/ 2/1987	0.0616	-0.0640	-0.1078	0.1069	-0.008	0.024
6/ 5/1987	0.0613	-0.0639	-0.1074	0.1068	-0.013	0.030
6/ 9/1987	0.0614	-0.0637	-0.1093	0.1068	-0.014	0.008
6/16/1987	0.0610	-0.0635	-0.1082	0.1069	-0.021	0.019
6/23/1987	0.0608	-0.0634	-0.1095	0.1068	-0.024	0.006
6/25/1987	0.0607	-0.0634	-0.1096	0.1068	-0.025	0.005
7/ 3/1987	0.0602	-0.0630	-0.1096	0.1067	-0.036	0.006
7/10/1987	0.0596	-0.0628	-0.1098	0.1067	-0.045	0.003
7/16/1987	0.0600	-0.0628	-0.1096	0.1068	-0.040	0.005
7/23/1987	0.0599	-0.0623	-0.1096	0.1039	-0.047	0.038
7/29/1987	0.0599	-0.0622	-0.1092	0.1067	-0.048	0.010
8/12/1987	0.0599	-0.0622	-0.1096	0.1057	-0.048	0.017
8/18/1987	0.0594	-0.0622	-0.1096	0.1067	-0.054	0.006
9/ 1/1987	-0.0594	0.0619	-0.1087	0.1065	-2.838	0.018
9/18/1987	0.0593	-0.0662	-0.1097	0.1062	-0.009	0.010
10/26/1987	0.0589	-0.0620	-0.1094	0.1060	-0.062	0.016
11/16/1987	0.0588	-0.0620	-0.1094	0.1058	-0.063	0.018
11/30/1987	0.0589	-0.0618	-0.1084	0.1058	-0.064	0.030
10/ 4/1988	0.0562	-0.0603	-0.1059	0.1023	-0.112	0.099

SLOPE # 2 POSITION 2 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0982	0.0970	0.0174	-0.0183	0.000	0.000
4/28/1987	-0.0982	0.0970	0.0174	-0.0183	0.000	0.000
4/30/1987	-0.0983	0.0968	0.0173	-0.0182	0.001	-0.002
5/ 5/1987	-0.0980	0.0970	0.0171	-0.0177	0.002	-0.010
5/ 8/1987	-0.0982	0.0969	0.0172	-0.0182	0.001	-0.003
5/12/1987	-0.0983	0.0968	0.0170	-0.0180	0.001	-0.008
5/14/1987	-0.0991	0.0959	0.0157	-0.0189	0.002	-0.013
5/19/1987	-0.0991	0.0961	0.0159	-0.0187	0.000	-0.013
5/21/1987	-0.0994	0.0961	0.0159	-0.0188	-0.003	-0.011
5/26/1987	-0.0990	0.0962	0.0161	-0.0187	0.000	-0.010
5/29/1987	-0.0992	0.0965	0.0160	-0.0187	-0.006	-0.011
6/ 2/1987	-0.0990	0.0963	0.0160	-0.0187	-0.001	-0.011
6/ 5/1987	-0.0992	0.0962	0.0160	-0.0162	-0.002	-0.040
6/ 9/1987	-0.0991	0.0962	0.0161	-0.0186	-0.001	-0.011
6/16/1987	-0.0993	0.0962	0.0158	-0.0183	-0.003	-0.018
6/23/1987	-0.0990	0.0964	0.0163	-0.0187	-0.002	-0.008
6/25/1987	-0.0990	0.0954	0.0160	-0.0189	0.009	-0.009
7/ 3/1987	-0.0996	0.0966	0.0158	-0.0188	-0.011	-0.013
7/10/1987	-0.0997	0.0965	0.0160	-0.0187	-0.011	-0.011
7/16/1987	-0.0998	0.0969	0.0163	-0.0185	-0.017	-0.010
7/23/1987	-0.0998	0.0967	0.0160	-0.0188	-0.015	-0.010
7/29/1987	-0.0998	0.0967	0.0162	-0.0187	-0.015	-0.009
8/12/1987	-0.0997	0.0968	0.0162	-0.0187	-0.015	-0.009
8/18/1987	-0.0996	0.0968	0.0160	-0.0187	-0.014	-0.011
9/ 1/1987	-0.0997	0.0966	0.0160	-0.0188	-0.013	-0.010
9/18/1987	-0.0992	0.0963	0.0161	-0.0198	-0.003	0.002
10/26/1987	-0.1002	0.0963	0.0160	-0.0190	-0.015	-0.008
11/16/1987	-0.1012	0.0965	0.0159	-0.0184	-0.029	-0.016
11/30/1987	-0.0998	0.0963	0.0160	-0.0190	-0.010	-0.008
10/ 4/1988	-0.0982	0.0950	0.0162	-0.0194	0.023	-0.001

SLOPE # 2 POSITION 0 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
5/ 5/1987	-0.1565	0.1547	0.1956	-0.1964	0.000	0.000
5/ 8/1987	-0.1561	0.1546	0.1958	-0.1970	0.006	0.009
5/12/1987	-0.1561	0.1549	0.1958	-0.1968	0.002	0.007
5/14/1987	-0.1571	0.1551	0.1946	-0.1974	-0.011	0.000
5/19/1987	-0.1572	0.1540	0.1946	-0.1975	0.000	0.001
5/21/1987	-0.1571	0.1539	0.1947	-0.1975	0.002	0.002
5/26/1987	-0.1568	0.1590	0.1946	-0.1974	-0.053	0.000
5/29/1987	-0.1570	0.1539	0.1949	-0.1976	0.003	0.006
6/ 2/1987	-0.1570	0.1540	0.1950	-0.1974	0.002	0.005
6/ 5/1987	-0.1578	0.1598	0.1887	-0.1975	-0.073	-0.067
6/ 9/1987	-0.1568	0.1549	0.1950	-0.1975	-0.006	0.006
6/16/1987	-0.1598	0.1560	0.1946	-0.1976	-0.053	0.002
6/23/1987	-0.1571	0.1539	0.1951	-0.1975	0.002	0.007
7/ 3/1987	-0.1570	0.1540	0.1951	-0.1977	0.002	0.009
7/10/1987	-0.1768	0.1732	0.1334	-0.1361	-0.446	-1.407
7/16/1987	-0.1677	0.1648	0.1345	-0.1365	-0.245	-1.390
7/23/1987	-0.1687	0.1766	0.1301	-0.1349	-0.392	-1.459
7/29/1987	-0.1671	0.1643	0.1339	-0.1364	-0.232	-1.398
8/12/1987	-0.2073	0.2046	-0.0103	0.0083	-1.157	-4.710
8/18/1987	-0.1992	0.1964	0.0174	-0.0197	-0.970	-4.071
9/ 1/1987	-0.1992	0.1963	-0.0104	0.0128	-0.968	-4.762
9/18/1987	-0.1920	0.1884	0.0206	-0.0220	-0.795	-4.008
10/26/1987	-0.2058	0.2022	0.0074	-0.0102	-1.112	-4.295
11/16/1987	-0.2068	0.2021	0.0037	-0.0064	-1.122	-4.381
11/30/1987	-0.2131	0.2096	-0.0083	0.0054	-1.281	-4.654
10/ 4/1988	-0.2116	0.2079	0.0168	-0.0202	-1.244	-4.073

SLOPE # 2 POSITION -2 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0904	0.0892	-0.0596	0.0581	0.000	0.000
4/28/1987	-0.0906	0.0893	-0.0595	0.0582	-0.003	0.000
4/30/1987	-0.0905	0.0891	-0.0596	0.0579	0.000	0.002
5/ 5/1987	-0.0905	0.0893	-0.0591	0.0584	-0.002	0.002
5/ 8/1987	-0.0905	0.0895	-0.0597	0.0590	-0.005	-0.011
5/12/1987	-0.0904	0.0893	-0.0597	0.0584	-0.001	-0.005
5/14/1987	-0.0912	0.0882	-0.0606	0.0576	0.002	-0.006
5/19/1987	-0.0914	0.0879	-0.0641	0.0577	0.003	-0.047
5/21/1987	-0.0912	0.0871	-0.0603	0.0576	0.015	-0.002
5/26/1987	-0.0909	0.0886	-0.0606	0.0576	0.001	-0.006
5/29/1987	-0.0913	0.0884	-0.0595	0.0572	-0.001	0.011
6/ 2/1987	-0.0913	0.0887	-0.0615	0.0578	-0.005	-0.018
6/ 5/1987	-0.0914	0.0886	-0.0606	0.0579	-0.005	-0.009
6/ 9/1987	-0.0912	0.0887	-0.0606	0.0575	-0.003	-0.005
6/16/1987	-0.0916	0.0886	-0.0609	0.0591	-0.007	-0.026
6/23/1987	-0.0912	0.0888	-0.0605	0.0561	-0.005	0.013
6/25/1987	-0.0917	0.0887	-0.0605	0.0578	-0.009	-0.007
7/ 3/1987	-0.0920	0.0889	-0.0609	0.0576	-0.015	-0.009
7/10/1987	-0.0919	0.0889	-0.0606	0.0584	-0.014	-0.015
7/16/1987	-0.0919	0.0891	-0.0607	0.0579	-0.016	-0.010
7/23/1987	-0.0921	0.0889	-0.0612	0.0579	-0.016	-0.016
7/29/1987	-0.0920	0.0893	0.0609	-0.0582	-0.019	2.714
7/29/1987	-0.0920	0.0893	-0.0609	0.0582	-0.019	-0.016
8/12/1987	-0.0921	0.0895	-0.0609	0.0580	-0.023	-0.014
8/18/1987	-0.0921	0.0894	-0.0608	0.0580	-0.022	-0.013
9/ 1/1987	-0.0922	0.0894	-0.0607	0.0581	-0.023	-0.013
9/18/1987	-0.0926	0.0893	-0.0569	0.0516	-0.026	0.105
10/26/1987	-0.0907	0.0877	-0.0612	0.0579	0.014	-0.016
11/16/1987	-0.0915	0.0880	-0.0611	0.0578	0.001	-0.014
11/30/1987	-0.0913	0.0878	-0.0612	0.0577	0.006	-0.014
10/ 4/1988	-0.0896	0.0879	-0.0621	0.0591	0.024	-0.040

SLOPE # 2 POSITION -4 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0410	0.0408	0.1255	-0.1267	0.000	0.000
4/28/1987	-0.0414	0.0401	0.1253	-0.1271	0.003	0.002
4/30/1987	-0.0411	0.0400	0.1255	-0.1269	0.008	0.002
5/ 5/1987	-0.0413	0.0403	0.1255	-0.1267	0.002	0.000
5/ 8/1987	-0.0412	0.0401	0.1260	-0.1270	0.006	0.009
5/12/1987	-0.0413	0.0409	0.1258	-0.1270	-0.005	0.007
5/14/1987	-0.0423	0.0393	0.1246	-0.1277	0.002	0.001
5/19/1987	-0.0428	0.0396	0.1234	-0.1277	-0.007	-0.013
5/21/1987	-0.0424	0.0391	0.1248	-0.1276	0.003	0.002
5/26/1987	-0.0425	0.0398	0.1251	-0.1278	-0.006	0.008
5/29/1987	-0.0424	0.0396	0.1252	-0.1278	-0.002	0.009
6/ 2/1987	-0.0422	0.0395	0.1253	-0.1272	0.001	0.003
6/ 5/1987	-0.0425	0.0416	0.1251	-0.1282	-0.026	0.013
6/ 9/1987	-0.0423	0.0397	0.1249	-0.1278	-0.002	0.006
6/16/1987	-0.0429	0.0402	0.1251	-0.1279	-0.015	0.009
6/23/1987	-0.0425	0.0400	0.1255	-0.1274	-0.008	0.008
6/25/1987	-0.0423	0.0397	0.1256	-0.1282	-0.002	0.018
7/ 3/1987	-0.0426	0.0398	0.1254	-0.1282	-0.007	0.016
7/10/1987	-0.0426	0.0399	0.1256	-0.1284	-0.008	0.021
7/16/1987	-0.0426	0.0400	0.1260	-0.1287	-0.009	0.029
7/23/1987	-0.0429	0.0401	0.1258	-0.1281	-0.014	0.020
7/29/1987	-0.0429	0.0402	0.1258	-0.1285	-0.015	0.024
8/12/1987	-0.0428	0.0402	0.1259	-0.1285	-0.014	0.025
8/18/1987	-0.0429	0.0402	0.1260	-0.1285	-0.015	0.026
9/ 1/1987	-0.0433	0.0403	0.1260	-0.1287	-0.021	0.029
9/18/1987	-0.0433	0.0410	0.1258	-0.1294	-0.029	0.034
10/26/1987	-0.0434	0.0400	0.1259	-0.1290	-0.018	0.031
11/16/1987	-0.0438	0.0397	0.1256	-0.1289	-0.019	0.026
11/30/1987	-0.0436	0.0403	0.1258	-0.1294	-0.024	0.034

SLOPE # 2 POSITION -6 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1818	0.1829	0.1710	-0.1720	0.000	0.000
4/28/1987	-0.1819	0.1801	0.1710	-0.1721	0.031	0.001
4/30/1987	-0.1820	0.1815	0.1709	-0.1714	0.014	-0.008
5/ 5/1987	-0.1819	0.1803	0.1712	-0.1721	0.029	0.003
5/ 8/1987	-0.1818	0.1801	0.1714	-0.1721	0.032	0.006
5/12/1987	-0.1819	0.1800	0.1712	-0.1721	0.032	0.003
5/14/1987	-0.1828	0.1792	0.1701	-0.1729	0.031	0.000
5/19/1987	-0.1829	0.1795	0.1702	-0.1726	0.026	-0.002
5/21/1987	-0.1830	0.1840	0.1702	-0.1728	-0.026	0.000
5/26/1987	-0.1828	0.1795	0.1705	-0.1728	0.028	0.003
5/29/1987	-0.1827	0.1794	0.1707	-0.1728	0.030	0.006
6/ 2/1987	-0.1828	0.1793	0.1705	-0.1730	0.030	0.006
6/ 5/1987	-0.1828	0.1794	0.1706	-0.1731	0.029	0.008
6/ 9/1987	-0.1826	0.1793	0.1707	-0.1730	0.032	0.008
6/23/1987	-0.1829	0.1792	0.1706	-0.1730	0.030	0.007
6/25/1987	-0.1826	0.1792	0.1709	-0.1731	0.033	0.011
7/ 3/1987	-0.1825	0.1790	0.1707	-0.1730	0.037	0.008
7/10/1987	-0.1826	0.1789	0.1703	-0.1731	0.037	0.005
7/16/1987	-0.1828	0.1792	0.1706	-0.1725	0.031	0.001
7/23/1987	-0.1834	0.1823	0.1707	-0.1639	-0.011	-0.096
7/29/1987	-0.1824	0.1792	0.1709	-0.1727	0.036	0.007
8/12/1987	-0.1825	0.1793	0.1706	-0.1730	0.033	0.007
8/18/1987	-0.1824	0.1793	0.1709	-0.1729	0.034	0.009
9/ 1/1987	-0.1828	0.1793	0.1704	-0.1730	0.030	0.005
9/18/1987	-0.1857	0.1890	0.1701	-0.1732	-0.115	0.003
10/26/1987	-0.1830	0.1790	0.1702	-0.1730	0.031	0.002
11/16/1987	-0.1831	0.1789	0.1698	-0.1734	0.031	0.002
11/30/1987	-0.1832	0.1790	0.1700	-0.1733	0.029	0.003
10/ 4/1988	-0.1837	0.1805	0.1701	-0.1733	0.006	0.005

SLOPE # 2 POSITION -8 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0593	0.0586	0.0661	-0.0672	0.000	0.000
4/28/1987	-0.0596	0.0587	0.0663	-0.0675	-0.005	0.006
4/30/1987	-0.0595	0.0586	0.0660	-0.0673	-0.002	0.000
5/ 5/1987	-0.0595	0.0588	0.0662	-0.0673	-0.005	0.002
5/ 8/1987	-0.0596	0.0589	0.0663	-0.0672	-0.007	0.002
5/12/1987	-0.0596	0.0588	0.0663	-0.0672	-0.006	0.002
5/14/1987	-0.0607	0.0581	0.0652	-0.0680	-0.010	-0.001
5/19/1987	-0.0581	0.0603	0.0653	-0.0676	-0.006	-0.005
5/21/1987	-0.0609	0.0582	0.0653	-0.0683	-0.014	0.003
5/26/1987	-0.0604	0.0582	0.0657	-0.0682	-0.008	0.007
5/29/1987	-0.0605	0.0585	0.0656	-0.0681	-0.013	0.005
6/ 2/1987	-0.0605	0.0583	0.0655	-0.0679	-0.010	0.001
6/ 5/1987	-0.0606	0.0582	0.0623	-0.0680	-0.010	-0.034
6/ 9/1987	-0.0606	0.0582	0.0657	-0.0681	-0.010	0.006
6/16/1987	-0.0614	0.0585	0.0655	-0.0681	-0.023	0.003
6/23/1987	-0.0607	0.0586	0.0658	-0.0681	-0.016	0.007
6/25/1987	-0.0609	0.0587	0.0659	-0.0682	-0.019	0.009
7/ 3/1987	-0.0610	0.0584	0.0658	-0.0684	-0.017	0.010
7/10/1987	-0.0612	0.0588	0.0658	-0.0682	-0.024	0.008
7/16/1987	-0.0614	0.0591	0.0659	-0.0681	-0.030	0.008
7/23/1987	-0.0617	0.0591	0.0658	-0.0677	-0.033	0.002
7/29/1987	-0.0614	0.0595	0.0659	-0.0680	-0.034	0.007
8/12/1987	-0.0617	0.0596	0.0659	-0.0676	-0.039	0.002
8/18/1987	-0.0616	0.0600	0.0660	-0.0678	-0.042	0.006
9/ 1/1987	-0.0621	0.0599	0.0655	-0.0678	-0.047	0.000
9/18/1987	-0.0626	0.0665	0.0650	0.0680	-0.128	-1.562
10/26/1987	-0.0629	0.0601	0.0649	-0.0675	-0.058	-0.010
11/16/1987	-0.0634	0.0603	0.0645	-0.0676	-0.066	-0.014
11/30/1987	-0.0633	0.0605	0.0646	-0.0677	-0.068	-0.011
10/ 4/1988	-0.0640	0.0615	0.0618	-0.0659	-0.087	-0.064

SLOPE # 2 POSITION -10 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1457	0.1441	0.0335	-0.0351	0.000	0.000
4/28/1987	-0.1453	0.1440	0.0335	-0.0353	0.006	0.002
4/30/1987	-0.1454	0.1440	0.0336	-0.0353	0.005	0.003
5/ 5/1987	-0.1453	0.1442	0.0338	-0.0351	0.003	0.003
5/ 8/1987	-0.1451	0.1433	0.0340	-0.0351	0.016	0.006
5/12/1987	-0.1454	0.1444	0.0339	-0.0353	0.000	0.007
5/14/1987	-0.1466	0.1431	0.0329	-0.0358	0.001	0.001
5/21/1987	-0.1463	0.1433	0.0330	-0.0346	0.002	-0.011
5/26/1987	-0.1464	0.1436	0.0333	-0.0364	-0.002	0.013
5/29/1987	-0.1467	0.1445	0.0333	-0.0347	-0.016	-0.007
6/ 2/1987	-0.1468	0.1442	0.0334	-0.0364	-0.014	0.014
6/ 5/1987	-0.1472	0.1445	0.0335	-0.0364	-0.022	0.015
6/ 9/1987	-0.1473	0.1448	0.0336	-0.0366	-0.026	0.018
6/16/1987	-0.1480	0.1451	0.0340	-0.0351	-0.038	0.006
6/23/1987	-0.1487	0.1457	0.0346	-0.0373	-0.053	0.038
6/25/1987	-0.1512	0.1459	0.0348	-0.0375	-0.084	0.042
7/ 3/1987	-0.1488	0.1458	0.0347	-0.0383	-0.055	0.050
7/10/1987	-0.1491	0.1464	0.0353	-0.0386	-0.065	0.061
7/16/1987	-0.1491	0.1467	0.0357	-0.0390	-0.069	0.070
7/23/1987	-0.1496	0.1461	0.0329	-0.0393	-0.068	0.041
7/29/1987	-0.1494	0.1466	0.0362	-0.0393	-0.071	0.079
8/12/1987	-0.1493	0.1468	0.0366	-0.0396	-0.072	0.087
9/ 1/1987	-0.1492	0.1467	0.0371	-0.0405	-0.070	0.103
9/18/1987	-0.1497	0.1463	0.0362	-0.0410	-0.071	0.099
10/26/1987	-0.1495	0.1462	0.0377	-0.0417	-0.068	0.124
11/16/1987	-0.1500	0.1459	0.0376	-0.0419	-0.070	0.125
11/30/1987	-0.1494	0.1459	0.0376	-0.0419	-0.063	0.125
10/ 4/1988	-0.1481	0.1448	0.0362	-0.0396	-0.036	0.083

SLOPE # 2 POSITION -12 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.3076	0.3058	-0.2233	0.2220	0.000	0.000
4/28/1987	-0.3078	0.3057	-0.2233	0.2218	-0.001	0.002
4/30/1987	-0.3078	0.3060	-0.2234	0.2220	-0.005	-0.001
5/ 5/1987	-0.3076	0.3059	-0.2234	0.2218	-0.001	0.001
5/ 8/1987	-0.3053	0.3058	-0.2235	0.2221	0.027	-0.003
5/12/1987	-0.3078	0.3059	-0.2233	0.2220	-0.003	0.000
5/14/1987	-0.3085	0.3051	-0.2242	0.2210	-0.002	0.001
5/19/1987	-0.3086	0.3051	-0.2242	0.2218	-0.003	-0.008
5/21/1987	-0.3086	0.3050	-0.2242	0.2211	-0.002	0.000
5/26/1987	-0.3084	0.3050	-0.2240	0.2212	0.000	0.001
5/29/1987	-0.3082	0.3052	-0.2239	0.2213	0.000	0.001
6/ 2/1987	-0.3079	0.3053	-0.2242	0.2218	0.002	-0.008
6/ 5/1987	-0.3066	0.3052	-0.2249	0.2213	0.018	-0.010
6/ 9/1987	-0.3085	0.3092	-0.2241	0.2214	-0.050	-0.002
6/16/1987	-0.3067	0.3054	-0.2257	0.2221	0.015	-0.029
6/25/1987	-0.3076	0.3055	-0.2248	0.2219	0.003	-0.016
7/ 3/1987	-0.3084	0.3050	-0.2247	0.2216	0.000	-0.012
7/10/1987	-0.3086	0.3053	-0.2248	0.2217	-0.006	-0.014
7/16/1987	-0.3088	0.3050	-0.2249	0.2224	-0.005	-0.023
7/23/1987	-0.3043	0.3080	-0.2250	0.2216	0.013	-0.015
7/29/1987	-0.3083	0.3049	-0.2252	0.2217	0.002	-0.018
8/12/1987	-0.3079	0.3053	-0.2252	0.2226	0.002	-0.029
8/18/1987	-0.3082	0.3054	-0.2251	0.2231	-0.002	-0.033
9/ 1/1987	-0.3085	0.3051	-0.2256	0.2228	-0.002	-0.036
9/18/1987	-0.3085	0.3047	-0.2260	0.2208	0.002	-0.017
10/26/1987	-0.3085	0.3044	-0.2260	0.2224	0.006	-0.036
11/16/1987	-0.3083	0.3042	-0.2264	0.2226	0.010	-0.043
11/30/1987	-0.3082	0.3042	-0.2267	0.2226	0.012	-0.046

SLOPE # 2 POSITION -14 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1914	0.1908	0.1447	-0.1461	0.000	0.000
4/28/1987	-0.1914	0.1898	0.1445	-0.1461	0.011	-0.002
4/30/1987	-0.1914	0.1899	0.1445	-0.1459	0.010	-0.005
5/ 5/1987	-0.1913	0.1899	0.1445	-0.1457	0.011	-0.007
5/ 8/1987	-0.1912	0.1901	0.1445	-0.1432	0.010	-0.036
5/12/1987	-0.1914	0.1902	0.1445	-0.1459	0.007	-0.005
5/14/1987	-0.1922	0.1892	0.1435	-0.1465	0.009	-0.009
5/19/1987	-0.1927	0.1893	0.1434	-0.1436	0.002	-0.044
5/21/1987	-0.1924	0.1893	0.1434	-0.1465	0.006	-0.010
5/26/1987	-0.1928	0.1900	0.1434	-0.1468	-0.007	-0.007
5/29/1987	-0.1925	0.1898	0.1432	-0.1463	-0.001	-0.015
6/ 2/1987	-0.1926	0.1899	0.1434	-0.1463	-0.003	-0.013
6/ 5/1987	-0.1927	0.1911	0.1422	-0.1462	-0.018	-0.028
6/ 9/1987	-0.1931	0.1902	0.1433	-0.1461	-0.013	-0.016
6/16/1987	-0.1916	0.1905	0.1430	-0.1459	0.001	-0.022
6/23/1987	-0.1936	0.1909	0.1429	-0.1458	-0.026	-0.024
6/25/1987	-0.1938	0.1911	0.1428	-0.1457	-0.031	-0.026
7/ 3/1987	-0.1940	0.1910	0.1418	-0.1456	-0.032	-0.039
7/10/1987	-0.1940	0.1910	0.1425	-0.1456	-0.032	-0.031
7/16/1987	-0.1942	0.1919	0.1426	-0.1453	-0.045	-0.033
7/23/1987	-0.1944	0.1876	0.1423	-0.1419	0.002	-0.076
7/29/1987	-0.1943	0.1915	0.1423	-0.1450	-0.041	-0.040
8/12/1987	-0.1944	0.1917	0.1423	-0.1449	-0.045	-0.041
8/18/1987	-0.1942	0.1919	0.1422	-0.1448	-0.045	-0.044
9/ 1/1987	-0.1946	0.1917	0.1421	-0.1448	-0.047	-0.045
9/18/1987	-0.1962	0.1924	0.1416	-0.1450	-0.074	-0.048
10/26/1987	-0.1951	0.1916	0.1415	-0.1449	-0.052	-0.051
11/16/1987	-0.1951	0.1908	0.1414	-0.1450	-0.043	-0.051
11/30/1987	-0.1950	0.1911	0.1414	-0.1445	-0.045	-0.056

SLOPE # 2 POSITION -16 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.2947	0.2938	0.1508	-0.1510	0.000	0.000
4/28/1987	-0.2949	0.2943	0.1505	-0.1512	-0.008	-0.001
4/30/1987	-0.2951	0.2937	0.1507	-0.1514	-0.003	0.003
5/ 5/1987	-0.2949	0.2932	0.1499	-0.1517	0.005	-0.002
5/ 8/1987	-0.2953	0.2936	0.1508	-0.1516	-0.005	0.007
5/12/1987	-0.2946	0.2935	0.1514	-0.1489	0.005	-0.017
5/14/1987	-0.2974	0.2926	0.1500	-0.1526	-0.017	0.009
5/19/1987	-0.2956	0.2956	0.1564	-0.1553	-0.031	0.114
5/21/1987	-0.2954	0.2925	0.1510	-0.1538	0.007	0.034
5/26/1987	-0.2962	0.2926	0.1512	-0.1537	-0.003	0.036
5/29/1987	-0.2954	0.2928	0.1515	-0.1538	0.003	0.040
6/ 2/1987	-0.2957	0.2930	0.1515	-0.1537	-0.002	0.039
6/ 5/1987	-0.2951	0.2942	0.1517	-0.1538	-0.009	0.042
6/ 9/1987	-0.2954	0.2929	0.1516	-0.1537	0.002	0.040
6/16/1987	-0.2954	0.2937	0.1517	-0.1521	-0.007	0.023
6/25/1987	-0.2957	0.2930	0.1520	-0.1537	-0.002	0.045
7/ 3/1987	-0.2955	0.2929	0.1520	-0.1543	0.001	0.052
7/10/1987	-0.2956	0.2929	0.1521	-0.1545	0.000	0.055
7/16/1987	-0.2956	0.2931	0.1524	-0.1548	-0.002	0.062
7/23/1987	-0.2956	0.2939	0.1524	-0.1547	-0.012	0.061
7/29/1987	-0.2953	0.2961	0.1526	-0.1548	-0.033	0.064
8/12/1987	-0.2954	0.2932	0.1529	-0.1549	-0.001	0.069
8/18/1987	-0.2961	0.2934	0.1530	-0.1540	-0.012	0.060
9/ 1/1987	-0.2957	0.2932	0.1530	-0.1552	-0.005	0.073
9/18/1987	-0.2959	0.2939	0.1528	-0.1555	-0.015	0.075
10/26/1987	-0.2961	0.2930	0.1531	-0.1558	-0.007	0.082
11/16/1987	-0.2961	0.2930	0.1528	-0.1556	-0.007	0.076
11/30/1987	-0.2964	0.2931	0.1522	-0.1559	-0.012	0.072

SLOPE # 2 POSITION -18 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0579	0.0568	-0.0371	0.0357	0.000	0.000
4/28/1987	-0.0580	0.0565	-0.0371	0.0355	0.002	0.002
4/30/1987	-0.0577	0.0569	-0.0372	0.0357	0.001	-0.001
5/ 5/1987	-0.0582	0.0569	-0.0372	0.0357	-0.005	-0.001
5/ 8/1987	-0.0584	0.0568	-0.0373	0.0356	-0.006	-0.001
5/12/1987	-0.0581	0.0557	-0.0371	0.0358	0.010	-0.001
5/14/1987	-0.0591	0.0561	-0.0379	0.0348	-0.006	0.001
5/19/1987	-0.0591	0.0560	-0.0383	0.0346	-0.005	-0.001
5/21/1987	-0.0588	0.0560	-0.0382	0.0351	-0.001	-0.006
5/26/1987	-0.0590	0.0562	-0.0383	0.0355	-0.006	-0.011
5/29/1987	-0.0589	0.0579	-0.0381	0.0352	-0.024	-0.006
6/ 2/1987	-0.0587	0.0564	-0.0381	0.0355	-0.005	-0.009
6/ 5/1987	-0.0588	0.0562	-0.0381	0.0353	-0.003	-0.007
6/ 9/1987	-0.0589	0.0564	-0.0382	0.0354	-0.007	-0.009
6/16/1987	-0.0586	0.0562	-0.0396	0.0356	-0.001	-0.028
6/23/1987	-0.0588	0.0567	-0.0384	0.0358	-0.009	-0.016
6/25/1987	-0.0587	0.0564	-0.0385	0.0355	-0.005	-0.014
7/ 3/1987	-0.0589	0.0564	-0.0387	0.0357	-0.007	-0.018
7/10/1987	-0.0586	0.0562	-0.0387	0.0357	-0.001	-0.018
7/16/1987	-0.0586	0.0564	-0.0387	0.0359	-0.003	-0.021
7/23/1987	-0.0586	0.0564	-0.0388	0.0378	-0.003	-0.044
7/29/1987	-0.0585	0.0564	-0.0360	0.0387	-0.002	-0.022
8/12/1987	-0.0585	0.0565	-0.0390	0.0363	-0.003	-0.029
8/18/1987	-0.0585	0.0564	-0.0391	0.0364	-0.002	-0.031
9/ 1/1987	-0.0585	0.0563	-0.0393	0.0365	-0.001	-0.034
9/18/1987	-0.0588	0.0535	-0.0397	0.0364	0.028	-0.038
10/26/1987	-0.0586	0.0560	-0.0401	0.0369	0.001	-0.048
11/16/1987	-0.0585	0.0559	-0.0401	0.0362	0.003	-0.040
11/30/1987	-0.0593	0.0559	-0.0403	0.0368	-0.006	-0.049

SLOPE # 3 POSITION 16 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0360	0.0342	-0.0159	0.0143	0.000	0.000
4/28/1987	-0.0361	0.0343	-0.0156	0.0140	-0.002	0.007
4/30/1987	-0.0362	0.0335	-0.0158	0.0144	0.006	0.000
5/ 5/1987	-0.0360	0.0348	-0.0158	0.0146	-0.007	-0.002
5/ 8/1987	-0.0364	0.0349	-0.0157	0.0149	-0.013	-0.005
5/12/1987	-0.0362	0.0346	-0.0158	0.0146	-0.007	-0.002
5/14/1987	-0.0372	0.0338	-0.0167	0.0138	-0.009	-0.003
5/19/1987	-0.0370	0.0337	-0.0167	0.0137	-0.006	-0.002
5/21/1987	-0.0370	0.0337	-0.0165	0.0137	-0.006	0.000
5/26/1987	-0.0370	0.0341	-0.0166	0.0140	-0.010	-0.005
5/29/1987	-0.0372	0.0340	-0.0166	0.0137	-0.011	-0.001
6/ 2/1987	-0.0371	0.0340	-0.0165	0.0138	-0.010	-0.001
6/ 5/1987	-0.0371	0.0340	-0.0166	0.0139	-0.010	-0.003
6/ 9/1987	-0.0371	0.0338	-0.0178	0.0141	-0.008	-0.019
6/16/1987	-0.0372	0.0339	-0.0165	0.0138	-0.010	-0.001
6/23/1987	-0.0373	0.0315	-0.0167	0.0142	0.016	-0.008
6/30/1987	-0.0373	0.0341	-0.0192	0.0140	-0.014	-0.034
7/14/1987	-0.0382	0.0348	0.0144	-0.0174	-0.032	0.710
7/29/1987	-0.0375	0.0347	-0.0170	0.0151	-0.023	-0.022
10/ 2/1987	-0.0381	0.0336	-0.0184	0.0144	-0.017	-0.030
10/ 4/1988	-0.0386	0.0344	-0.0198	0.0154	-0.032	-0.057

SLOPE # 3 POSITION 12 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0570	0.0553	0.0616	-0.0631	0.000	0.000
4/28/1987	-0.0576	0.0556	0.0598	-0.0616	-0.010	-0.038
4/30/1987	-0.0571	0.0552	0.0601	-0.0596	0.000	-0.057
5/ 5/1987	-0.0566	0.0555	0.0603	-0.0613	0.002	-0.036
5/ 8/1987	-0.0572	0.0558	0.0601	-0.0605	-0.008	-0.047
5/12/1987	-0.0570	0.0556	0.0602	-0.0607	-0.003	-0.044
5/14/1987	-0.0581	0.0548	0.0591	-0.0622	-0.007	-0.039
5/19/1987	-0.0578	0.0545	0.0588	-0.0618	0.000	-0.047
5/21/1987	-0.0577	0.0548	0.0591	-0.0617	-0.002	-0.045
5/26/1987	-0.0578	0.0548	0.0591	-0.0617	-0.003	-0.045
5/29/1987	-0.0580	0.0549	0.0588	-0.0618	-0.007	-0.047
6/ 2/1987	-0.0581	0.0549	0.0587	-0.0618	-0.008	-0.048
6/ 5/1987	-0.0577	0.0553	0.0589	-0.0618	-0.008	-0.046
6/ 9/1987	-0.0577	0.0552	0.0598	-0.0614	-0.007	-0.040
6/16/1987	-0.0580	0.0551	0.0562	-0.0603	-0.009	-0.094
6/23/1987	-0.0582	0.0553	0.0561	-0.0611	-0.014	-0.086
6/30/1987	-0.0584	0.0553	0.0578	-0.0610	-0.016	-0.068
7/14/1987	-0.0591	0.0558	0.0574	-0.0607	-0.030	-0.076
7/29/1987	-0.0583	0.0558	0.0573	-0.0599	-0.021	-0.086
10/ 2/1987	-0.0610	0.0555	0.0613	-0.0596	-0.048	-0.044
10/ 4/1988	-0.0619	0.0560	0.0515	-0.0566	-0.064	-0.190

SLOPE # 3 POSITION 8 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.0397	-0.0394	0.1166	-0.1181	0.000	0.000
4/28/1987	0.0396	-0.0407	0.1164	-0.1182	0.014	-0.001
4/30/1987	0.0397	-0.0406	0.1165	-0.1185	0.014	0.003
5/ 5/1987	0.0399	-0.0404	0.1168	-0.1179	0.014	0.000
5/ 8/1987	0.0398	-0.0404	0.1169	-0.1182	0.013	0.005
5/12/1987	0.0397	-0.0390	0.1170	-0.1181	-0.005	0.005
5/14/1987	0.0378	-0.0412	0.1159	-0.1190	-0.001	0.002
5/19/1987	0.0387	-0.0412	0.1158	-0.1190	0.009	0.001
5/21/1987	0.0385	-0.0411	0.1160	-0.1189	0.006	0.002
5/26/1987	0.0392	-0.0407	0.1162	-0.1188	0.009	0.003
5/29/1987	0.0389	-0.0411	0.1161	-0.1191	0.010	0.006
6/ 2/1987	0.0389	-0.0410	0.1161	-0.1190	0.009	0.005
6/ 5/1987	0.0389	-0.0411	0.1175	-0.1190	0.010	0.021
6/ 9/1987	0.0391	-0.0394	0.1163	-0.1191	-0.007	0.008
6/16/1987	0.0388	-0.0401	0.1166	-0.1192	-0.002	0.013
6/23/1987	0.0389	-0.0408	0.1175	-0.1194	0.007	0.025
6/30/1987	0.0389	-0.0411	0.1162	-0.1191	0.010	0.007
7/14/1987	0.0394	-0.0408	0.1167	-0.1194	0.013	0.016
7/29/1987	0.0389	-0.0405	0.1163	-0.1189	0.003	0.006
10/ 2/1987	0.0358	-0.0413	0.1161	-0.1194	-0.023	0.009
10/ 4/1988	0.0351	-0.0410	0.1073	-0.1116	-0.034	-0.181

SLOPE # 3 POSITION 4 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.0765	-0.0786	0.2193	-0.2180	0.000	0.000
4/28/1987	0.0765	-0.0744	0.2162	-0.2182	-0.048	-0.033
4/30/1987	0.0769	-0.0787	0.2222	-0.2205	0.006	0.062
5/ 5/1987	0.0769	-0.0785	0.2168	-0.2179	0.003	-0.030
5/ 8/1987	0.0771	-0.0759	0.2264	-0.2184	-0.024	0.086
5/12/1987	0.0770	-0.0790	0.2161	-0.2179	0.010	-0.038
5/14/1987	0.0765	-0.0747	0.2148	-0.2185	-0.045	-0.046
5/19/1987	0.0758	-0.0786	0.2150	-0.2186	-0.008	-0.043
5/21/1987	0.0761	-0.0779	0.2159	-0.2185	-0.013	-0.033
5/26/1987	0.0760	-0.0796	0.2151	-0.2184	0.006	-0.044
5/29/1987	0.0755	-0.0791	0.2160	-0.2191	-0.006	-0.025
6/ 2/1987	0.0757	-0.0794	0.2158	-0.2189	0.000	-0.030
6/ 5/1987	0.0760	-0.0794	0.2216	-0.2185	0.003	0.032
6/ 9/1987	0.0762	-0.0793	0.2166	-0.2181	0.005	-0.030
6/16/1987	0.0704	-0.0779	0.2148	-0.2188	-0.078	-0.043
6/23/1987	0.0765	-0.0798	0.2136	-0.2168	0.014	-0.079

SLOPE # 3 POSITION -3 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0371	0.0365	0.0149	-0.0164	0.000	0.000
4/28/1987	-0.0371	0.0354	0.0147	-0.0167	0.013	0.001
4/30/1987	-0.0371	0.0357	0.0146	-0.0165	0.009	-0.002
5/ 5/1987	-0.0360	0.0347	0.0180	-0.0195	0.033	0.071
5/ 8/1987	-0.0360	0.0350	0.0182	-0.0196	0.030	0.074
5/12/1987	-0.0361	0.0348	0.0181	-0.0195	0.031	0.072
5/14/1987	-0.0371	0.0339	0.0171	-0.0200	0.030	0.066
5/19/1987	-0.0369	0.0338	0.0169	-0.0202	0.033	0.066
5/21/1987	-0.0376	0.0339	0.0171	-0.0203	0.024	0.070
5/26/1987	-0.0369	0.0341	0.0172	-0.0204	0.030	0.072
5/29/1987	-0.0369	0.0343	0.0172	-0.0202	0.028	0.070
6/ 2/1987	-0.0368	0.0341	0.0163	-0.0200	0.031	0.057
6/ 5/1987	-0.0365	0.0340	0.0170	-0.0204	0.036	0.070
6/ 9/1987	-0.0366	0.0341	0.0167	-0.0202	0.033	0.064
6/16/1987	-0.0368	0.0340	0.0173	-0.0201	0.032	0.070
6/23/1987	-0.0368	0.0342	0.0160	-0.0200	0.030	0.054
6/30/1987	-0.0372	0.0390	0.0140	-0.0167	-0.030	-0.007
7/14/1987	-0.0360	0.0345	0.0180	-0.0196	0.036	0.072
7/29/1987	-0.0367	0.0343	0.0174	-0.0193	0.030	0.062
10/ 2/1987	-0.0374	0.0336	0.0157	-0.0202	0.030	0.053
10/ 4/1988	-0.0359	0.0301	0.0079	-0.0120	0.087	-0.131

SLOPE # 3 POSITION -4 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0984	0.0968	0.0360	-0.0375	0.000	0.000
4/28/1987	-0.0984	0.0966	0.0357	-0.0375	0.002	-0.003
4/30/1987	-0.0984	0.0967	0.0361	-0.0377	0.001	0.003
5/ 5/1987	-0.1009	0.0996	0.0368	-0.0380	-0.061	0.015
5/ 8/1987	-0.1015	0.1001	0.0369	-0.0380	-0.073	0.016
5/12/1987	-0.1011	0.0998	0.0368	-0.0381	-0.065	0.016
5/14/1987	-0.1022	0.1031	0.0360	-0.0391	-0.116	0.018
5/19/1987	-0.1020	0.0987	0.0359	-0.0390	-0.063	0.016
5/21/1987	-0.1020	0.0994	0.0360	-0.0391	-0.071	0.018
5/26/1987	-0.1019	0.0990	0.0363	-0.0389	-0.065	0.019
5/29/1987	-0.1022	0.0991	0.0362	-0.0392	-0.070	0.022
6/ 2/1987	-0.1022	0.0993	0.0369	-0.0403	-0.072	0.042
6/ 5/1987	-0.1023	0.0997	0.0359	-0.0393	-0.078	0.019
6/ 9/1987	-0.1022	0.0995	0.0396	-0.0340	-0.075	0.001
6/16/1987	-0.1032	0.1010	0.0385	-0.0415	-0.103	0.074
6/23/1987	-0.1033	0.1003	0.0385	-0.0401	-0.096	0.058
6/30/1987	-0.1025	0.0990	0.0365	-0.0401	-0.072	0.036
7/29/1987	-0.1039	0.1012	0.0396	-0.0417	-0.114	0.089
10/ 2/1987	-0.1041	0.0999	0.0395	-0.0432	-0.101	0.105

SLOPE # 3 POSITION -8 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.2514	0.2499	-0.0685	0.0674	0.000	0.000
4/28/1987	-0.2515	0.2498	-0.0686	0.0673	0.000	0.000
4/30/1987	-0.2514	0.2499	-0.0685	0.0674	0.000	0.000
5/ 5/1987	-0.2511	0.2502	-0.0681	0.0674	0.000	0.005
5/ 8/1987	-0.2515	0.2508	-0.0680	0.0676	-0.012	0.003
5/12/1987	-0.2514	0.2502	-0.0682	0.0673	-0.003	0.005
5/14/1987	-0.2521	0.2491	-0.0689	0.0663	0.001	0.008
5/19/1987	-0.2519	0.2487	-0.0694	0.0664	0.008	0.001
5/21/1987	-0.2520	0.2483	-0.0691	0.0664	0.012	0.005
5/26/1987	-0.2519	0.2494	-0.0688	0.0665	0.000	0.007
5/29/1987	-0.2519	0.2489	-0.0685	0.0657	0.006	0.019
6/ 2/1987	-0.2515	0.2488	-0.0684	0.0658	0.012	0.019
6/ 5/1987	-0.2515	0.2489	-0.0685	0.0659	0.010	0.017
6/ 9/1987	-0.2516	0.2517	-0.0682	0.0656	-0.023	0.024
6/16/1987	-0.2516	0.2489	-0.0680	0.0656	0.009	0.026
6/23/1987	-0.2514	0.2489	-0.0682	0.0655	0.012	0.025
6/30/1987	-0.2516	0.2489	-0.0686	0.0657	0.009	0.018
7/14/1987	-0.2517	0.2494	-0.0675	0.0648	0.002	0.041
7/29/1987	-0.2512	0.2488	-0.0648	0.0649	0.015	0.071
10/ 2/1987	-0.2515	0.2478	-0.0674	0.0482	0.023	0.233

SLOPE # 3 POSITION -12 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0053	0.0039	-0.0274	0.0257	0.000	0.000
4/28/1987	-0.0056	0.0037	-0.0275	0.0255	-0.001	0.001
4/30/1987	-0.0055	0.0039	-0.0273	0.0253	-0.002	0.006
5/ 5/1987	-0.0052	0.0041	-0.0272	0.0256	-0.001	0.003
5/ 8/1987	-0.0046	0.0042	-0.0270	0.0259	0.005	0.002
5/12/1987	-0.0054	0.0039	-0.0273	0.0257	-0.001	0.001
5/14/1987	-0.0062	0.0031	-0.0283	0.0248	-0.001	0.000
5/19/1987	-0.0062	0.0031	-0.0283	0.0248	-0.001	0.000
5/21/1987	-0.0060	0.0032	-0.0279	0.0250	0.000	0.002
5/26/1987	-0.0059	0.0032	-0.0281	0.0252	0.001	-0.002
5/29/1987	-0.0061	0.0033	-0.0281	0.0251	-0.002	-0.001
6/ 2/1987	-0.0061	0.0031	-0.0280	0.0248	0.000	0.003
6/ 5/1987	-0.0059	0.0031	-0.0281	0.0251	0.002	-0.001
6/ 9/1987	-0.0050	0.0030	-0.0282	0.0252	0.014	-0.003
6/16/1987	-0.0059	0.0028	-0.0282	0.0253	0.006	-0.005
6/23/1987	-0.0058	0.0029	-0.0284	0.0254	0.006	-0.008
6/30/1987	-0.0055	0.0025	-0.0275	0.0240	0.014	0.018
7/14/1987	-0.0059	0.0032	-0.0279	0.0256	0.001	-0.005
7/29/1987	-0.0058	0.0036	-0.0286	0.0262	-0.002	-0.019
10/ 2/1987	-0.0062	-0.0025	-0.0297	0.0253	0.063	-0.022
10/ 4/1988	-0.0083	0.0043	-0.0329	0.0277	-0.039	-0.086

SLOPE # 3 POSITION -16 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.0715	-0.0733	-0.0232	0.0224	0.000	0.000
4/28/1987	0.0716	-0.0734	-0.0224	0.0224	0.002	0.009
4/30/1987	0.0717	-0.0735	-0.0233	0.0223	0.005	0.000
5/ 5/1987	0.0722	-0.0740	-0.0210	0.0228	0.016	0.021
5/ 8/1987	0.0720	-0.0736	-0.0233	0.0227	0.009	-0.005
5/12/1987	0.0722	-0.0737	-0.0235	0.0228	0.013	-0.008
5/14/1987	0.0693	-0.0745	-0.0223	0.0218	-0.011	0.017
5/19/1987	0.0711	-0.0746	-0.0241	0.0220	0.010	-0.006
5/21/1987	0.0712	-0.0756	-0.0196	0.0222	0.023	0.044
5/26/1987	0.0716	-0.0735	-0.0219	0.0224	0.003	0.015
6/ 2/1987	0.0715	-0.0745	-0.0244	0.0226	0.014	-0.016
6/ 5/1987	0.0715	-0.0758	-0.0229	0.0226	0.029	0.001
6/ 9/1987	0.0715	-0.0751	-0.0230	0.0226	0.021	0.000
6/16/1987	0.0716	-0.0746	-0.0230	0.0229	0.016	-0.003
6/23/1987	0.0716	-0.0742	-0.0254	0.0242	0.011	-0.046
6/30/1987	0.0715	-0.0740	-0.0212	0.0220	0.008	0.028
7/14/1987	0.0720	-0.0749	-0.0260	0.0238	0.024	-0.048
7/29/1987	0.0715	-0.0736	-0.0190	0.0220	0.003	0.053
10/ 2/1987	0.0715	-0.0755	-0.0249	0.0253	0.025	-0.053
10/ 4/1988	0.0715	-0.0776	-0.0367	0.0350	0.049	-0.299

SLOPE # 4 POSITION 20 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1877	0.1859	0.0268	-0.0274	0.000	0.000
4/28/1987	-0.1867	0.1847	0.0254	-0.0272	0.025	-0.018
4/30/1987	-0.1871	0.1852	0.0254	-0.0276	0.015	-0.014
5/ 5/1987	-0.1878	0.1860	0.0252	-0.0272	-0.002	-0.021
5/ 8/1987	-0.1883	0.1865	0.0252	-0.0272	-0.014	-0.021
5/12/1987	-0.1886	0.1872	0.0249	-0.0262	-0.025	-0.036
5/14/1987	-0.1900	0.1861	0.0252	-0.0271	-0.029	-0.022
5/19/1987	-0.1896	0.1858	0.0228	-0.0265	-0.021	-0.056
5/21/1987	-0.1899	0.1864	0.0225	-0.0264	-0.031	-0.061
5/26/1987	-0.1908	0.1870	0.0203	-0.0257	-0.048	-0.094
5/29/1987	-0.1906	0.1867	0.0218	-0.0255	-0.043	-0.079
6/ 2/1987	-0.1913	0.1876	0.0213	-0.0250	-0.061	-0.091
6/ 5/1987	-0.1920	0.1896	0.0211	-0.0248	-0.092	-0.095
6/ 9/1987	-0.1924	0.1888	0.0208	-0.0230	-0.087	-0.119
6/16/1987	-0.1937	0.1902	0.0199	-0.0232	-0.118	-0.127
6/23/1987	-0.1952	0.1926	0.0189	-0.0180	-0.163	-0.198
7/29/1987	-0.1984	0.1949	0.0150	-0.0177	-0.226	-0.246
10/ 2/1987	-0.2002	0.1971	0.0139	-0.0163	-0.272	-0.275

SLOPE # 4 POSITION 16 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1352	0.1334	0.0924	-0.0943	0.000	0.000
4/28/1987	-0.1353	0.1332	0.0925	-0.0945	0.001	0.003
4/30/1987	-0.1351	0.1338	0.0924	-0.0929	-0.003	-0.016
5/ 5/1987	-0.1350	0.1334	0.0925	-0.0944	0.002	0.002
5/ 8/1987	-0.1351	0.1334	0.0929	-0.0945	0.001	0.008
5/12/1987	-0.1352	0.1334	0.0928	-0.0946	0.000	0.008
5/14/1987	-0.1370	0.1332	0.0917	-0.0947	-0.018	-0.003
5/19/1987	-0.1362	0.1325	0.0916	-0.0952	-0.001	0.001
5/21/1987	-0.1359	0.1329	0.0907	-0.0952	-0.002	-0.009
5/26/1987	-0.1356	0.1322	0.0916	-0.0950	0.009	-0.001
5/29/1987	-0.1358	0.1324	0.0920	-0.0955	0.005	0.009
6/ 2/1987	-0.1357	0.1323	0.0920	-0.0953	0.007	0.007
6/ 5/1987	-0.1359	0.1326	0.0920	-0.0948	0.001	0.001
6/ 9/1987	-0.1358	0.1330	0.0923	-0.0901	-0.002	-0.049
6/16/1987	-0.1359	0.1327	0.0924	-0.0955	0.000	0.014
6/23/1987	-0.1366	0.1326	0.0926	-0.0959	-0.007	0.021
7/29/1987	-0.1362	0.1331	0.0933	-0.0959	-0.008	0.029
10/ 2/1987	-0.1371	0.1334	0.0929	-0.0959	-0.022	0.024

SLOPE # 4 POSITION 12 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.1138	-0.1149	-0.0931	0.0912	0.000	0.000
4/28/1987	0.1137	-0.1153	-0.0930	0.0908	0.003	0.006
4/30/1987	0.1137	-0.1150	-0.0930	0.0911	0.000	0.002
5/ 5/1987	0.1140	-0.1150	-0.0930	0.0912	0.003	0.001
5/ 8/1987	0.1143	-0.1151	-0.0929	0.0915	0.008	-0.001
5/12/1987	0.1138	-0.1147	-0.0931	0.0912	-0.002	0.000
5/14/1987	0.1126	-0.1172	-0.0924	0.0905	0.013	0.016
5/19/1987	0.1125	-0.1154	-0.0940	0.0903	-0.009	0.000
5/21/1987	0.1127	-0.1152	-0.0936	0.0900	-0.009	0.008
5/26/1987	0.1127	-0.1155	-0.0937	0.0903	-0.006	0.003
5/29/1987	0.1165	-0.1152	-0.0931	0.0897	0.034	0.017
6/ 2/1987	0.1127	-0.1150	-0.0939	0.0906	-0.011	-0.002
6/ 5/1987	0.1155	-0.1153	-0.0913	0.0906	0.024	0.028
6/ 9/1987	0.1156	-0.1149	-0.0941	0.0909	0.021	-0.008
6/16/1987	0.1125	-0.1148	-0.0941	0.0909	-0.016	-0.008
6/23/1987	0.1127	-0.1156	-0.0941	0.0911	-0.005	-0.010
7/29/1987	0.1129	-0.1141	-0.0941	0.0911	-0.020	-0.010
10/ 2/1987	0.1103	-0.1150	-0.0952	0.0930	-0.039	-0.045

SLOPE # 4 POSITION B TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.1431	0.1416	-0.0175	0.0169	0.000	0.000
4/28/1987	-0.1432	0.1428	-0.0175	0.0160	-0.015	0.010
4/30/1987	-0.1393	0.1415	-0.0173	0.0158	0.045	0.015
5/ 5/1987	-0.1430	0.1417	-0.0172	0.0160	0.000	0.014
5/ 8/1987	-0.1429	0.1415	-0.0180	0.0161	0.003	0.003
5/12/1987	-0.1429	0.1417	-0.0170	0.0161	0.001	0.015
5/14/1987	-0.1436	0.1405	-0.0181	0.0153	0.007	0.011
5/19/1987	-0.1437	0.1405	-0.0181	0.0151	0.006	0.014
5/21/1987	-0.1427	0.1409	-0.0178	0.0152	0.013	0.016
5/26/1987	-0.1437	0.1406	-0.0181	0.0152	0.005	0.013
5/29/1987	-0.1436	0.1407	-0.0197	0.0160	0.005	-0.015
6/ 2/1987	-0.1427	0.1407	-0.0263	0.0155	0.015	-0.085
6/ 5/1987	-0.1437	0.1407	-0.0191	0.0155	0.003	-0.002
6/ 9/1987	-0.1436	0.1407	-0.0178	0.0175	0.005	-0.010
6/16/1987	-0.1435	0.1406	-0.0183	0.0157	0.007	0.005
6/23/1987	-0.1430	0.1407	-0.0182	0.0157	0.011	0.006
7/29/1987	-0.1431	0.1407	-0.0187	0.0165	0.010	-0.009
10/ 2/1987	-0.1433	0.1396	-0.0183	0.0164	0.021	-0.003

SLOPE # 4 POSITION 4 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.0829	0.0812	-0.0386	0.0370	0.000	0.000
4/28/1987	-0.0829	0.0804	-0.0386	0.0366	0.009	0.005
4/30/1987	-0.0829	0.0811	-0.0386	0.0369	0.001	0.001
5/ 5/1987	-0.0827	0.0813	-0.0384	0.0370	0.001	0.002
5/ 8/1987	-0.0828	0.0814	-0.0383	0.0369	-0.001	0.005
5/12/1987	-0.0826	0.0813	-0.0383	0.0369	0.002	0.005
5/14/1987	-0.0837	0.0804	-0.0394	0.0358	0.000	0.005
5/19/1987	-0.0837	0.0802	-0.0395	0.0357	0.002	0.005
5/21/1987	-0.0825	0.0804	-0.0409	0.0401	0.014	-0.062
5/26/1987	-0.0837	0.0806	-0.0391	0.0368	-0.002	-0.003
5/29/1987	-0.0823	0.0807	-0.0396	0.0360	0.013	0.000
6/ 2/1987	-0.0835	0.0807	-0.0429	0.0360	-0.001	-0.038
6/ 5/1987	-0.0835	0.0807	-0.0392	0.0360	-0.001	0.005
6/ 9/1987	-0.0838	0.0812	-0.0349	0.0387	-0.010	0.023
6/16/1987	-0.0835	0.0808	-0.0396	0.0369	-0.002	-0.010
6/23/1987	-0.0838	0.0798	-0.0411	0.0364	0.006	-0.022
7/29/1987	-0.0824	0.0798	-0.0398	0.0369	0.022	-0.013
10/ 2/1987	-0.0838	0.0803	-0.0400	0.0349	0.000	0.008

SLOPE # 4 POSITION O TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.0122	-0.0136	0.1116	-0.1129	0.000	0.000
4/28/1987	0.0050	-0.0053	0.1115	-0.1131	-0.178	0.001
4/30/1987	0.0122	-0.0138	0.1117	-0.1130	0.002	0.002
5/ 5/1987	0.0125	-0.0134	0.1119	-0.1131	0.001	0.006
5/ 8/1987	0.0127	-0.0137	0.1121	-0.1131	0.007	0.008
5/12/1987	0.0127	-0.0140	0.1121	-0.1131	0.010	0.008
5/14/1987	0.0113	-0.0146	0.1107	-0.1156	0.001	0.021
5/19/1987	0.0116	-0.0148	0.1106	-0.1139	0.007	0.000
5/21/1987	0.0119	-0.0146	0.1109	-0.1157	0.008	0.024
5/26/1987	0.0121	-0.0147	0.1111	-0.1138	0.011	0.005
5/29/1987	0.0120	-0.0147	0.1111	-0.1139	0.010	0.006
6/ 2/1987	0.0120	-0.0148	0.1110	-0.1139	0.011	0.005
6/ 5/1987	0.0093	-0.0079	0.1112	-0.1140	-0.099	0.008
6/ 9/1987	0.0087	-0.0078	0.1116	-0.1138	-0.107	0.010
6/16/1987	0.0107	-0.0149	0.1112	-0.1142	-0.002	0.010
6/23/1987	0.0102	-0.0138	0.1112	-0.1142	-0.021	0.010
7/29/1987	0.0128	-0.0153	0.1113	-0.1141	0.026	0.010
10/ 2/1987	0.0128	-0.0164	0.1117	-0.1158	0.039	0.034

SLOPE # 4 POSITION -4 TILTMETER DATA:

DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	-0.2891	0.2879	0.0391	-0.0402	0.000	0.000
4/28/1987	-0.2893	0.2877	0.0390	-0.0405	0.000	0.002
4/30/1987	-0.2894	0.2879	0.0390	-0.0404	-0.003	0.001
5/ 5/1987	-0.2892	0.2881	0.0393	-0.0399	-0.003	-0.001
5/ 8/1987	-0.2893	0.2884	0.0395	-0.0398	-0.008	0.000
5/12/1987	-0.2891	0.2882	0.0396	-0.0405	-0.003	0.009
5/14/1987	-0.2928	0.2872	0.0384	-0.0404	-0.035	-0.006
5/19/1987	-0.2898	0.2868	0.0383	-0.0412	0.005	0.002
5/21/1987	-0.2899	0.2870	0.0384	-0.0353	0.001	-0.064
5/26/1987	-0.2899	0.2863	0.0388	-0.0413	0.009	0.009
5/29/1987	-0.2900	0.2872	0.0387	-0.0414	-0.002	0.009
6/ 2/1987	-0.2897	0.2872	0.0386	-0.0411	0.001	0.005
6/ 5/1987	-0.2900	0.2872	0.0387	-0.0401	-0.002	-0.006
6/ 9/1987	-0.2900	0.2870	0.0390	-0.0400	0.000	-0.003
6/16/1987	-0.2899	0.2863	0.0381	-0.0408	0.009	-0.005
6/23/1987	-0.2897	0.2875	0.0371	-0.0321	-0.002	-0.116
7/29/1987	-0.2900	0.2870	0.0376	-0.0406	0.000	-0.013
10/ 2/1987	-0.2904	0.2867	0.0331	-0.0409	-0.001	-0.061

SLOPE # 4 POSITION -8 TILTMETER DATA:

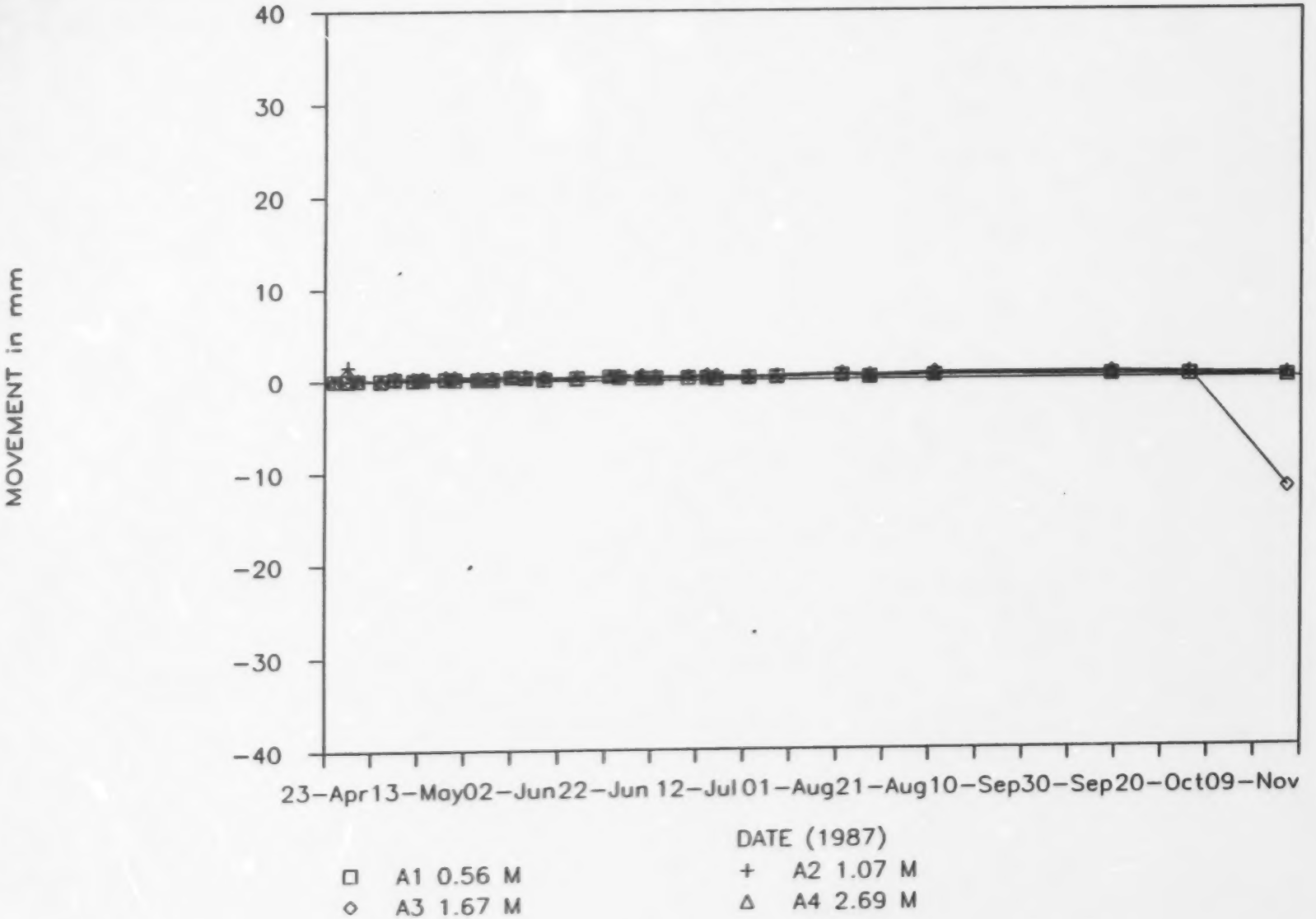
DATE	PEG1	PEG3	PEG4	PEG2	TILT NORTH(DEG)	TILT EAST(DEG)
4/25/1987	0.0159	-0.0172	-0.0668	0.0654	0.000	0.000
4/28/1987	0.0156	-0.0174	-0.0663	0.0652	-0.001	0.008
4/30/1987	0.0166	-0.0172	-0.0656	0.0651	0.008	0.017
5/ 5/1987	0.0158	-0.0172	-0.0665	0.0653	-0.001	0.005
5/ 8/1987	0.0159	-0.0170	-0.0664	0.0655	-0.002	0.003
5/12/1987	0.0159	-0.0171	-0.0665	0.0654	-0.001	0.003
5/14/1987	0.0157	-0.0180	-0.0672	0.0644	0.007	0.007
5/19/1987	0.0149	-0.0180	-0.0671	0.0641	-0.002	0.011
5/21/1987	0.0152	-0.0180	-0.0671	0.0642	0.001	0.010
5/26/1987	0.0152	-0.0178	-0.0671	0.0643	-0.001	0.009
5/29/1987	0.0150	-0.0178	-0.0669	0.0644	-0.003	0.010
6/ 2/1987	0.0162	-0.0206	-0.0671	0.0643	0.042	0.009
6/ 5/1987	0.0146	-0.0203	-0.0654	0.0643	0.021	0.029
6/ 9/1987	0.0148	-0.0207	-0.0680	0.0644	0.028	-0.002
6/16/1987	0.0148	-0.0181	-0.0679	0.0641	-0.002	0.002
6/23/1987	0.0152	-0.0197	-0.0672	0.0643	0.021	0.008
7/29/1987	0.0150	-0.0179	-0.0670	0.0640	-0.002	0.014
10/ 2/1987	0.0143	-0.0195	-0.0676	0.0640	0.008	0.007

APPENDIX B

EXTENSOMETER GRAPHS - DIFFERENTIAL STRATA DISPLACEMENT

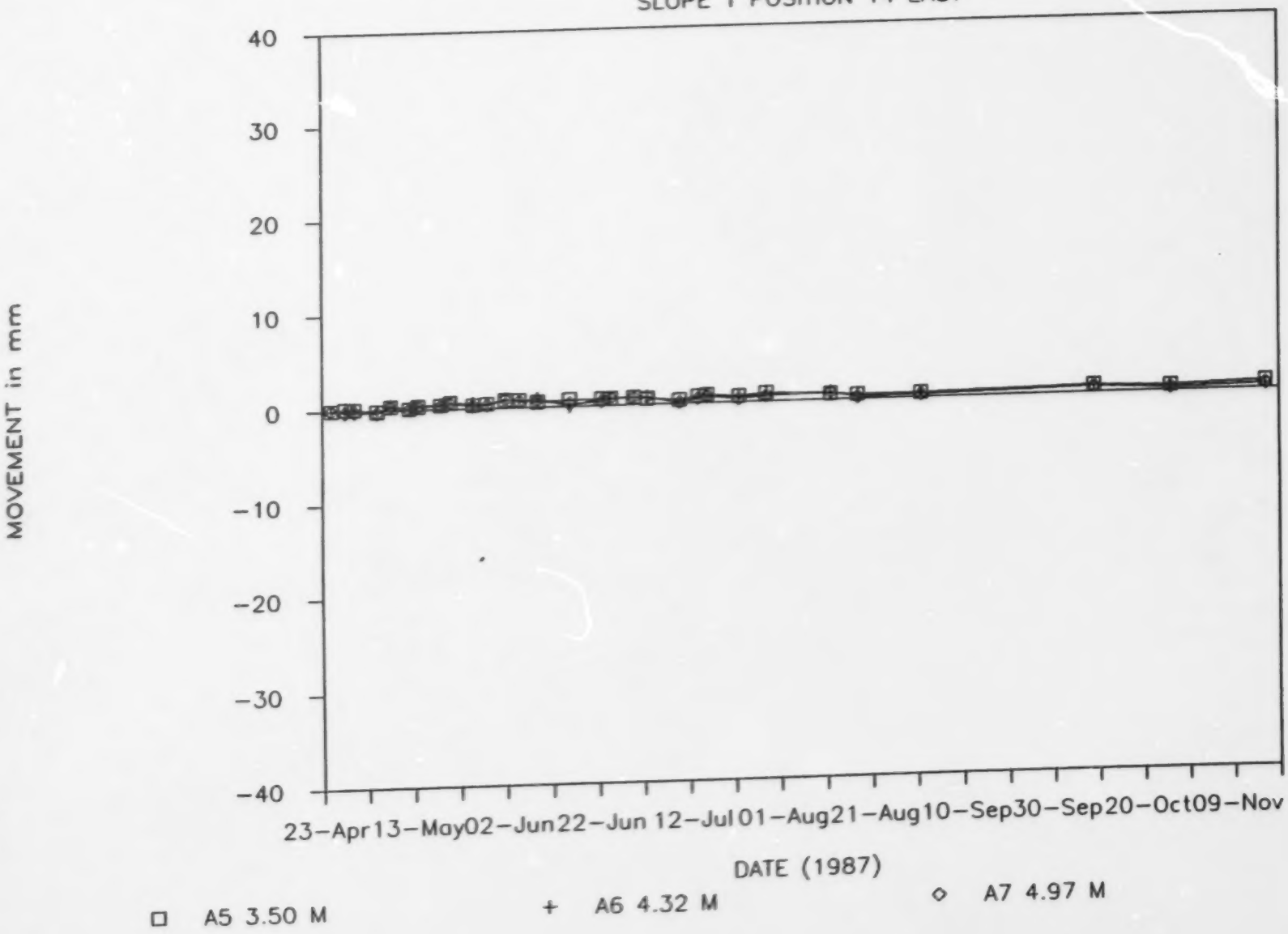
LINGAN EXTENSOMETER SITE

SLOPE 1 POSITION 14 EAST



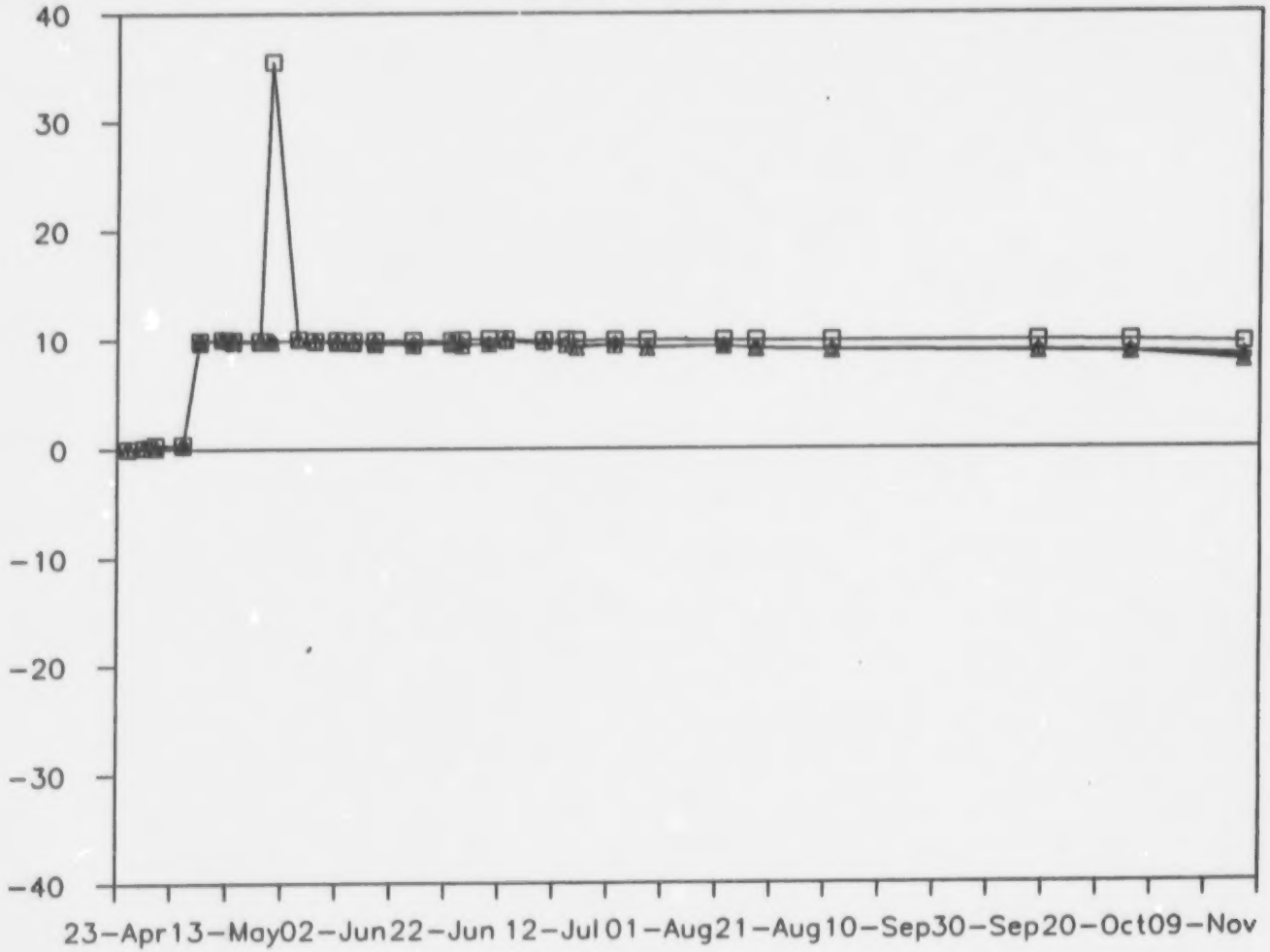
LINGAN EXTENSOMETER SITE

SLOPE 1 POSITION 14 EAST



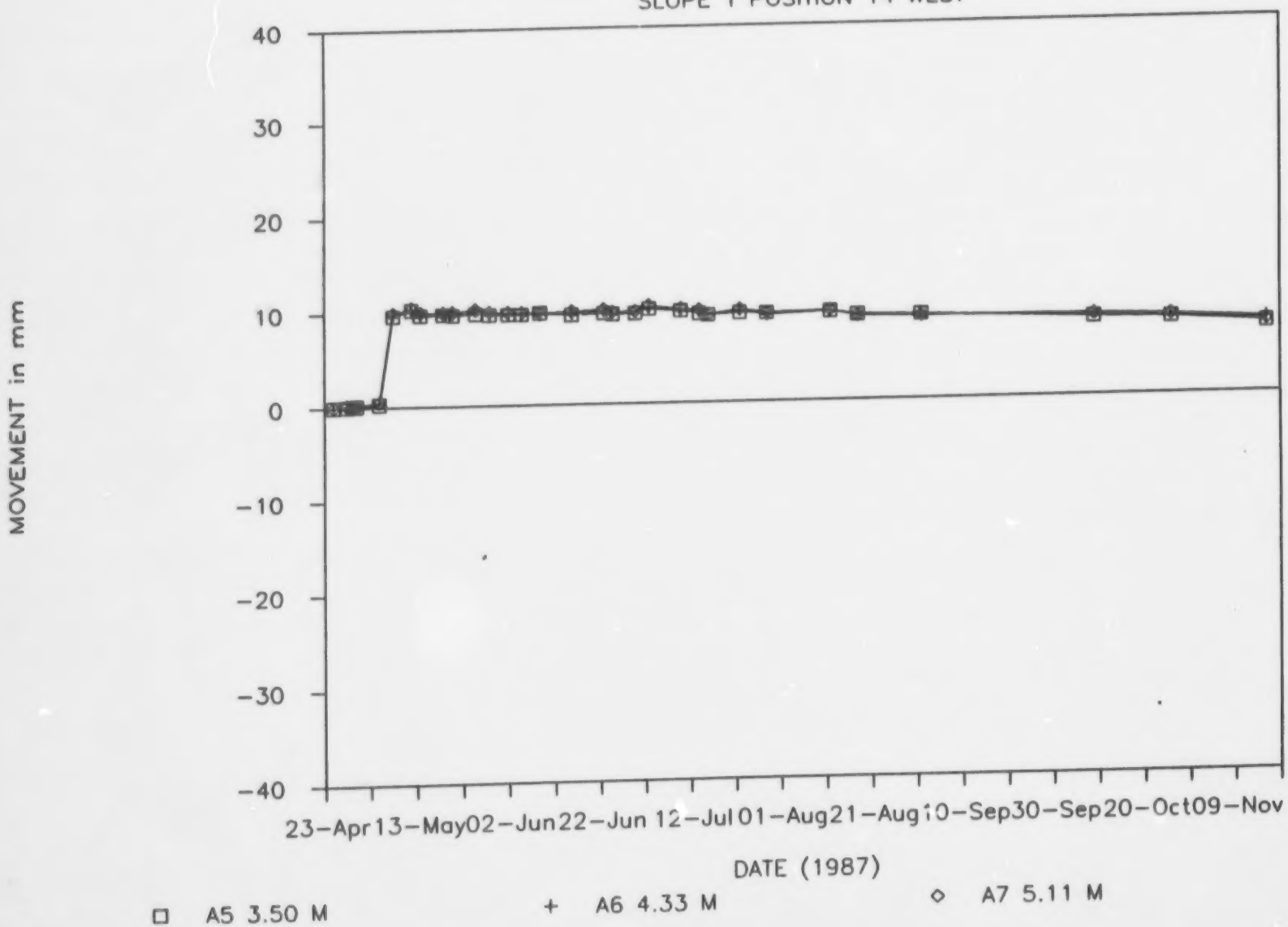
LINGAN EXTENSOMETER SITE

SLOPE 1 POSITION 14 WEST



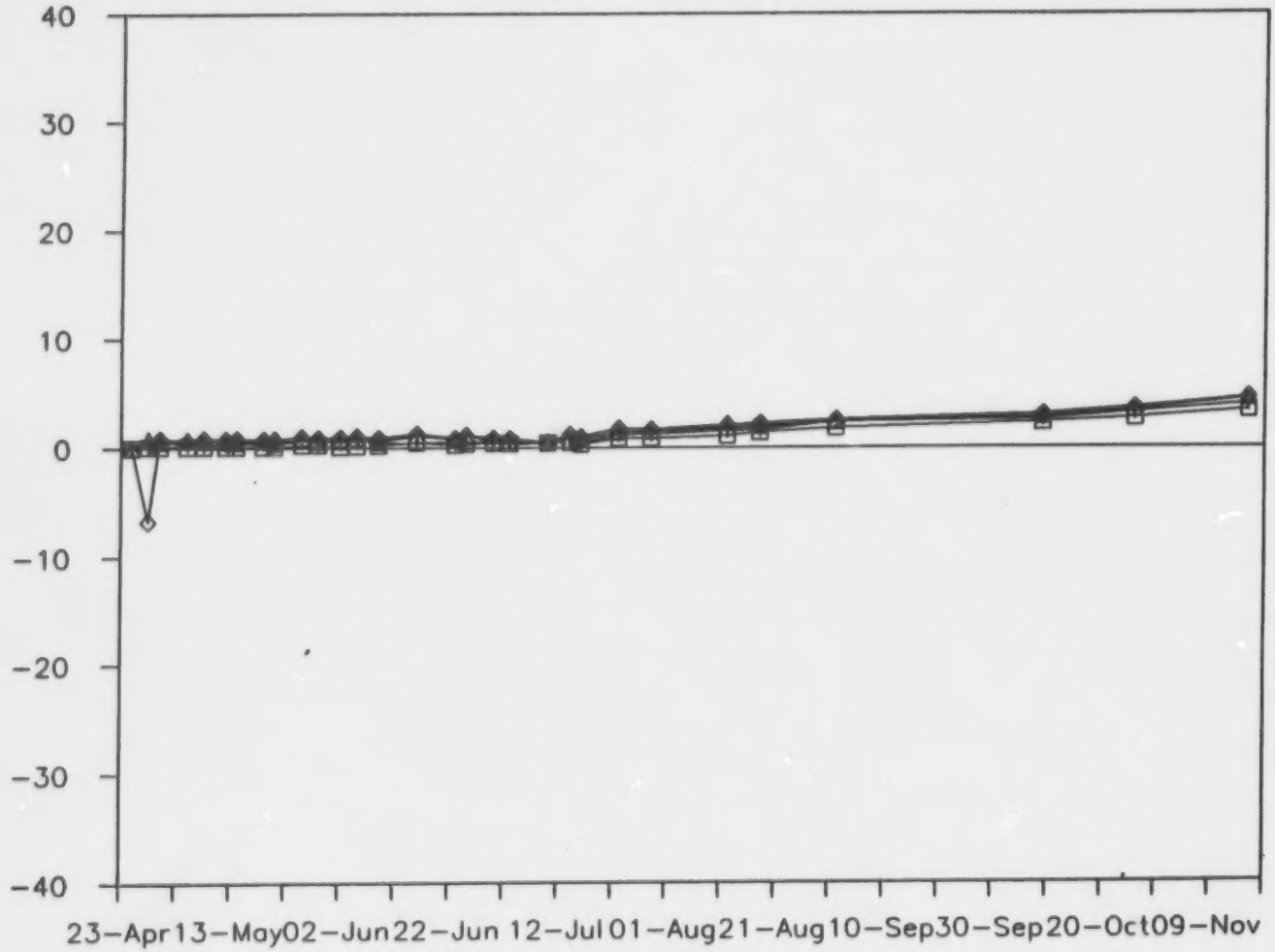
LINGAN EXTENSOMETER SITE

SLOPE 1 POSITION 14 WEST



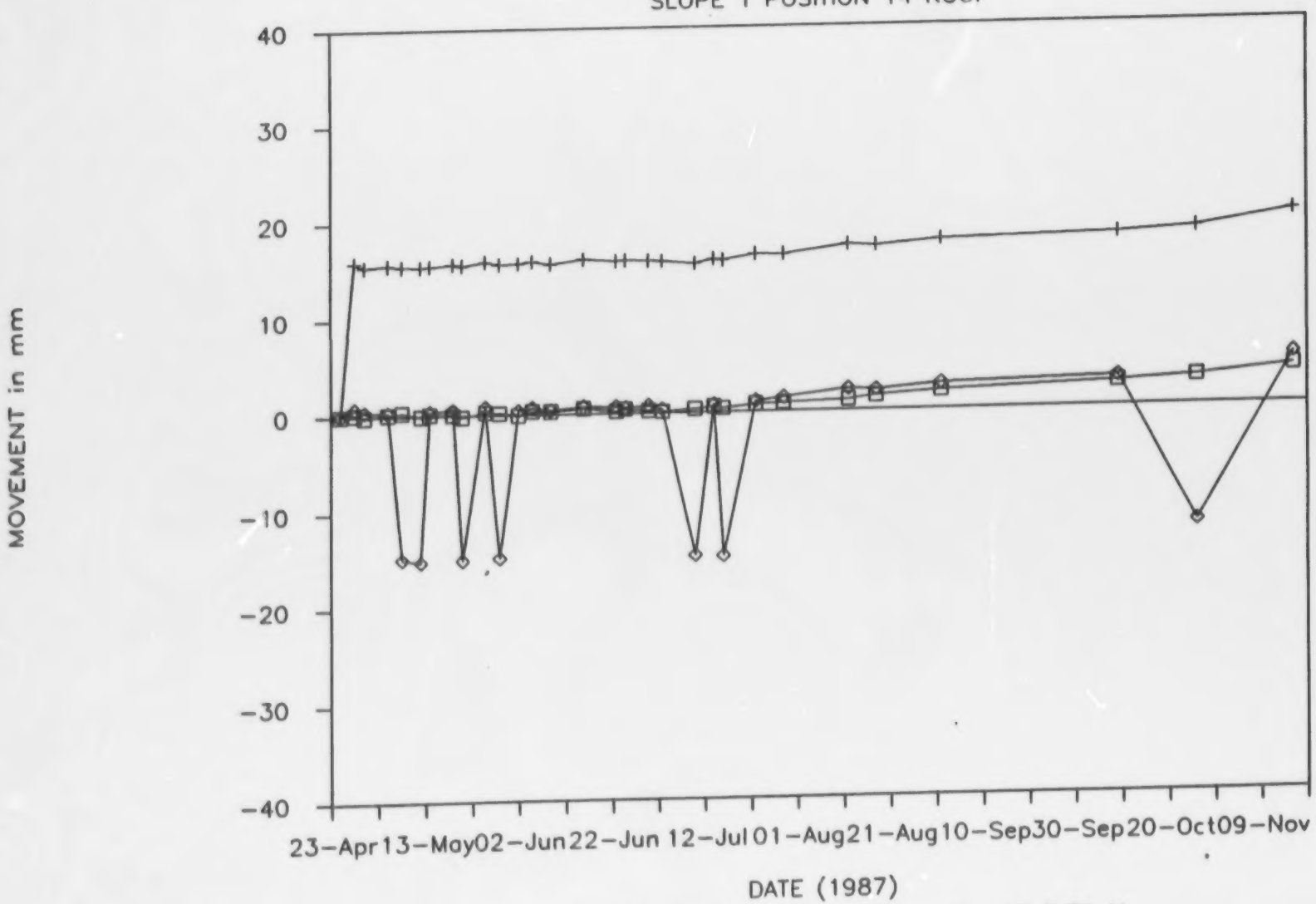
LINGAN EXTENSOMETER SITE

SLOPE 1 POSITION 14 ROOF



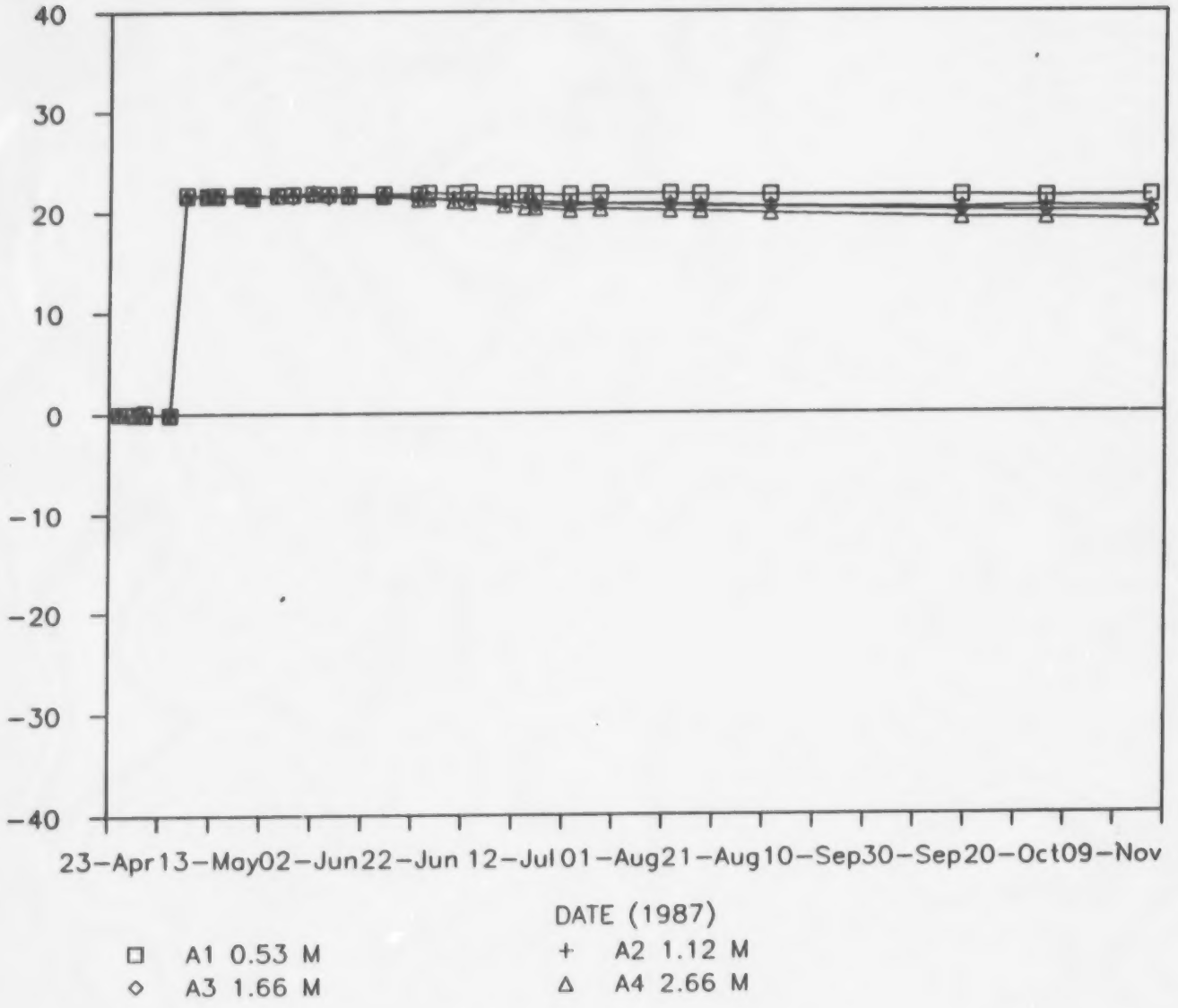
LINGAN EXTENSOMETER SITE

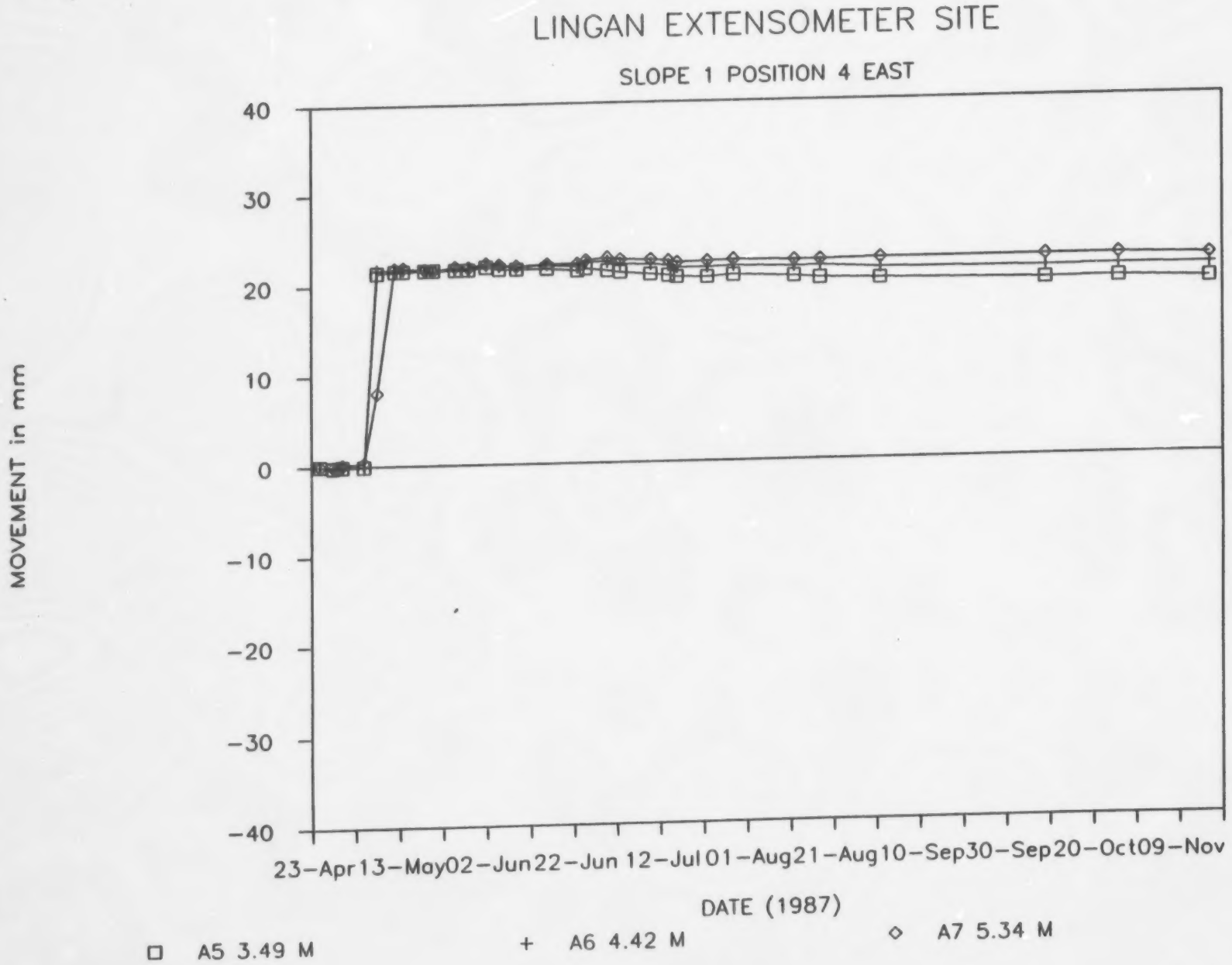
SLOPE 1 POSITION 14 ROOF



LINGAN EXTENSOMETER SITE

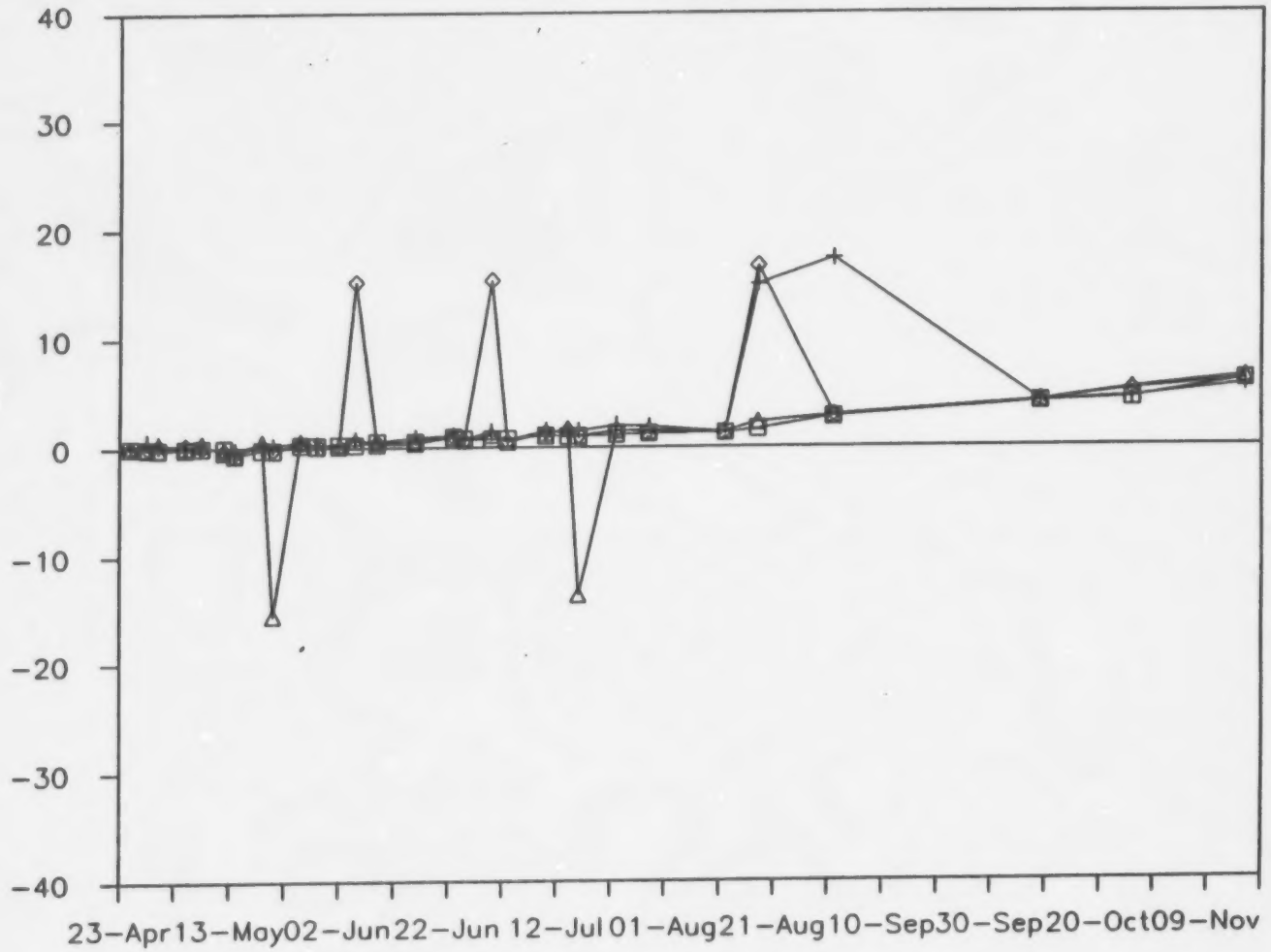
SLOPE 1 POSITION 4 EAST




LINGAN EXTENSOMETER SITE
SLOPE 1 POSITION 4 EAST
MOVEMENT in mm
40
30
20
10
0
-10
-20
-30
-40
23-Apr
13-May
02-Jun
22-Jun
12-Jul
01-Aug
21-Aug
10-Sep
30-Sep
20-Oct
09-Nov
DATE (1987)
A5 3.49 M
A6 4.42 M
A7 5.34 M

LINGAN EXTENSOMETER SITE

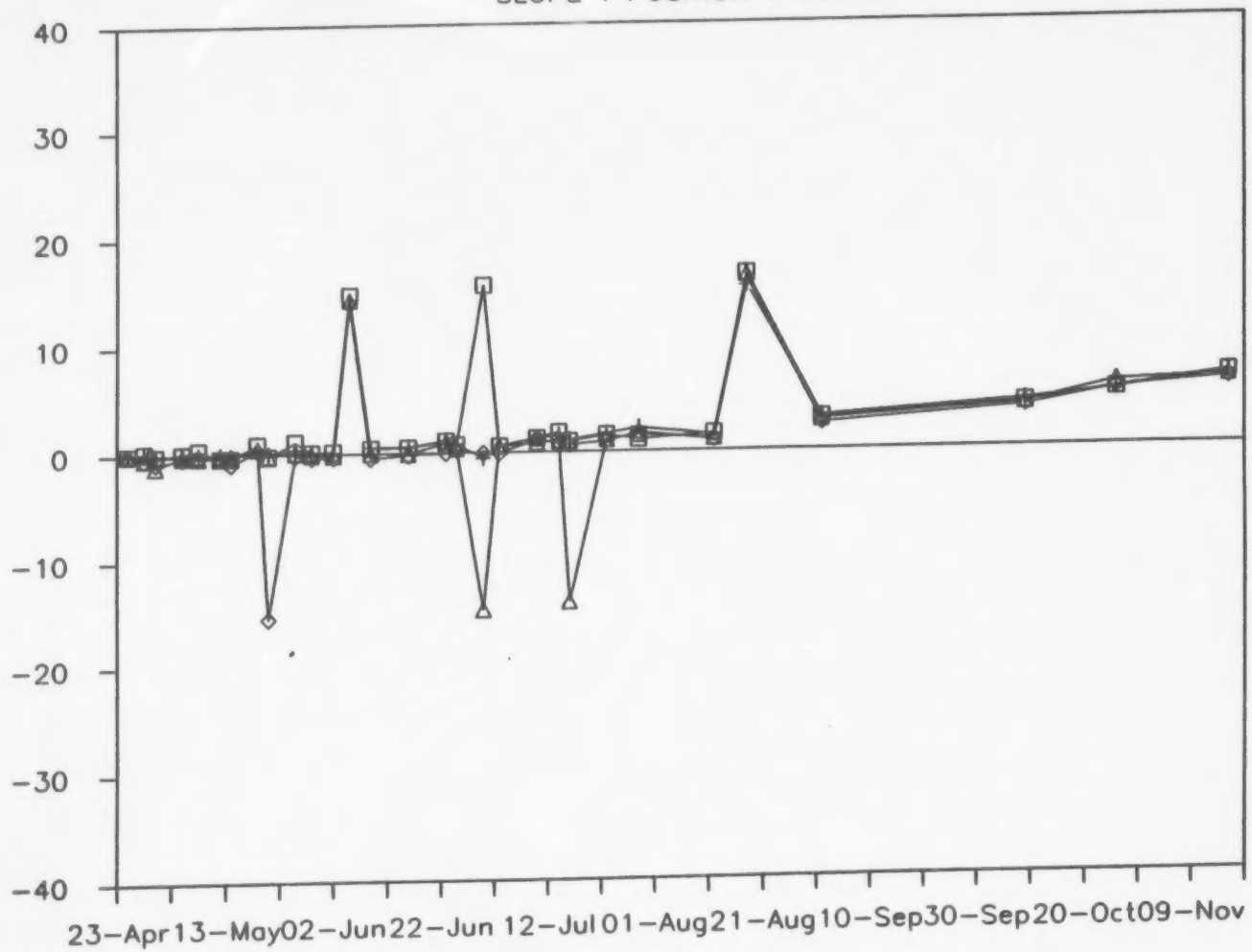
SLOPE 1 POSITION 4 ROOF



MOVEMENT in mm

LINGAN EXTENSOMETER SITE

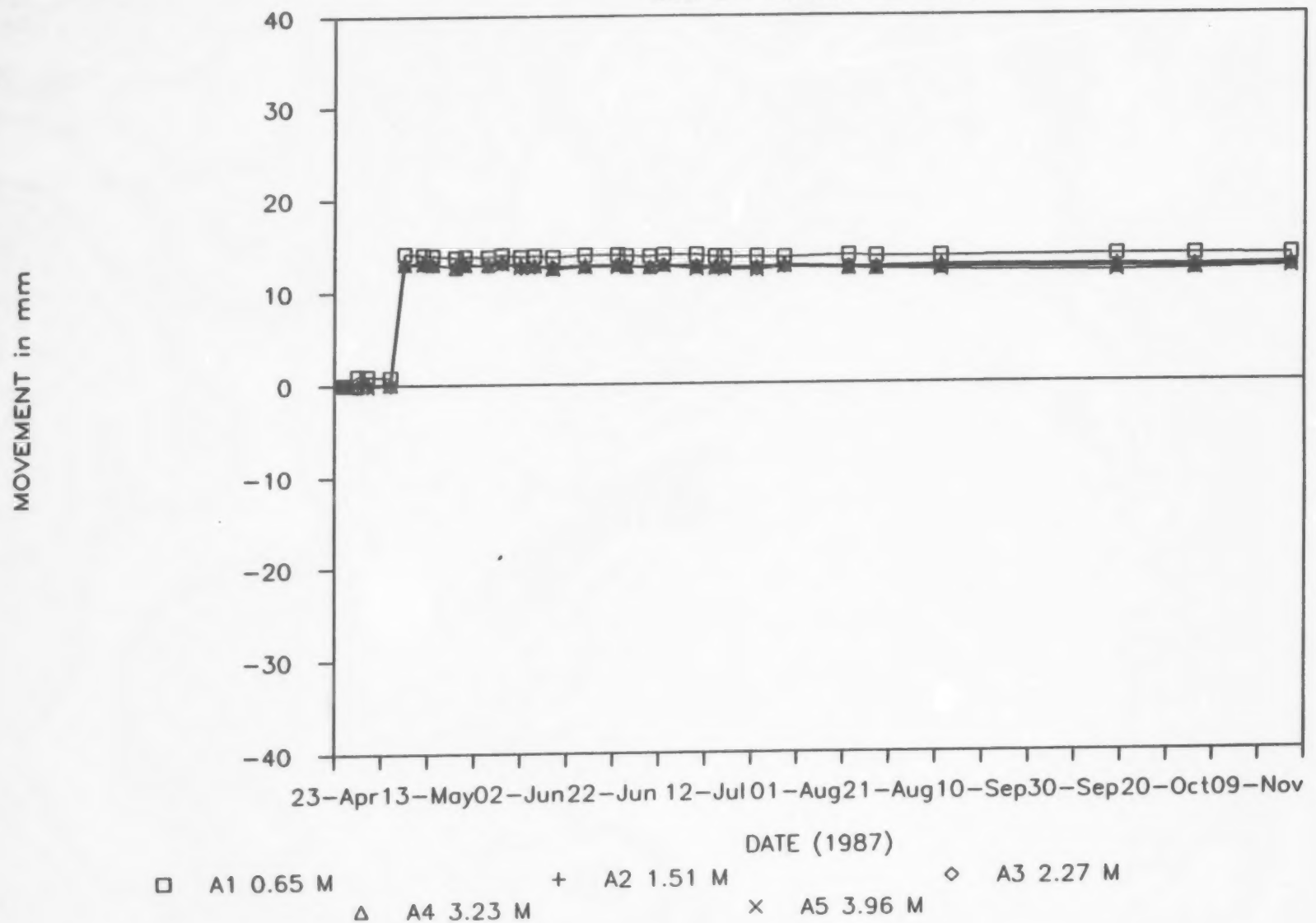
SLOPE 1 POSITION 4 ROOF

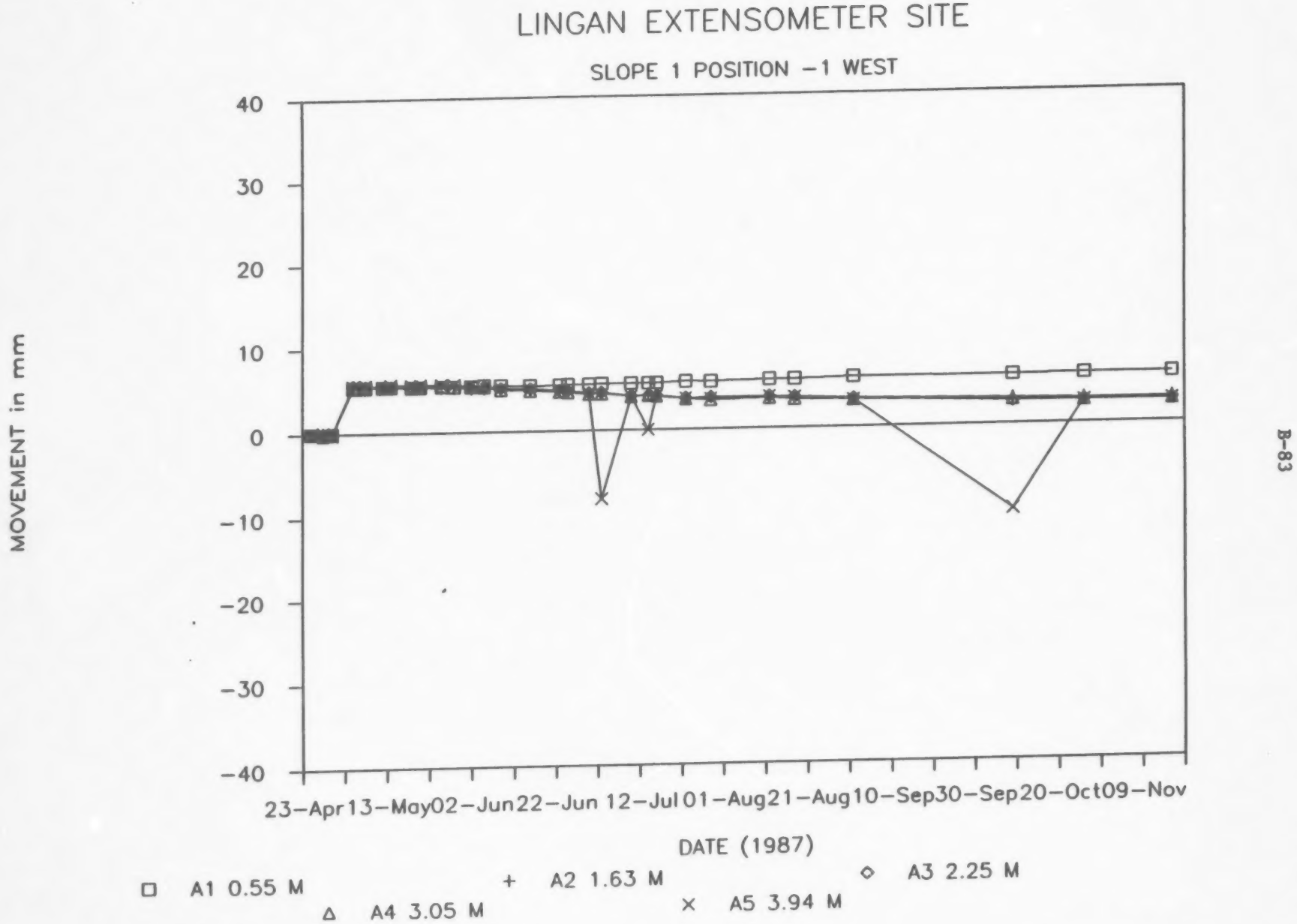


MOVEMENT in mm

LINGAN EXTENSOMETER SITE

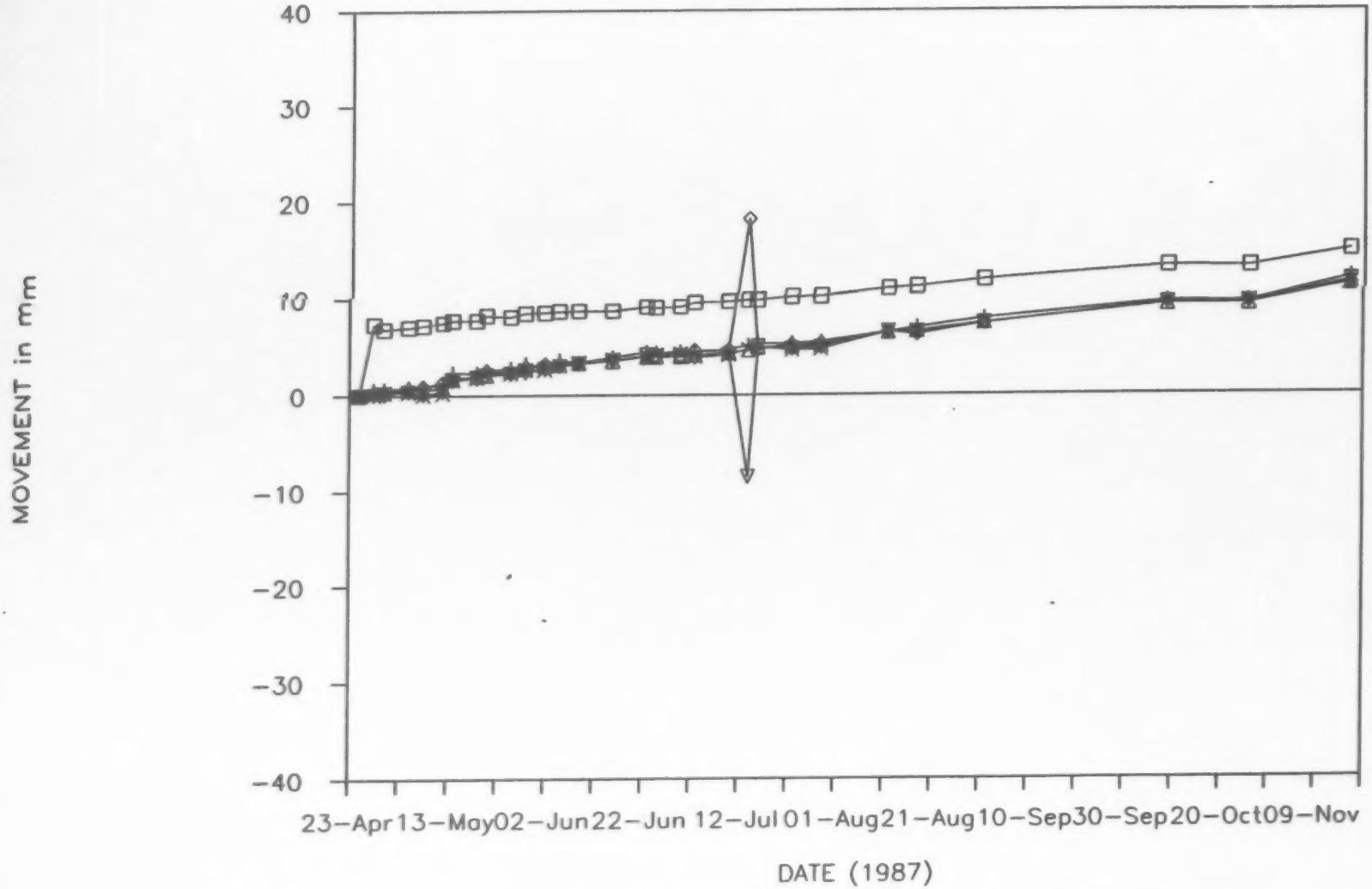
SLOPE 1 POSITION -1 EAST




LINGAN EXTENSOMETER SITE
SLOPE 1 POSITION -1 WEST
MOVEMENT in mm
40
30
20
10
0
-10
-20
-30
-40
23-Apr
13-May
02-Jun
22-Jun
12-Jul
01-Aug
21-Aug
10-Sep
30-Sep
20-Oct
09-Nov
DATE (1987)
A1 0.55 M
A2 1.63 M
A3 2.25 M
A4 3.05 M
A5 3.94 M

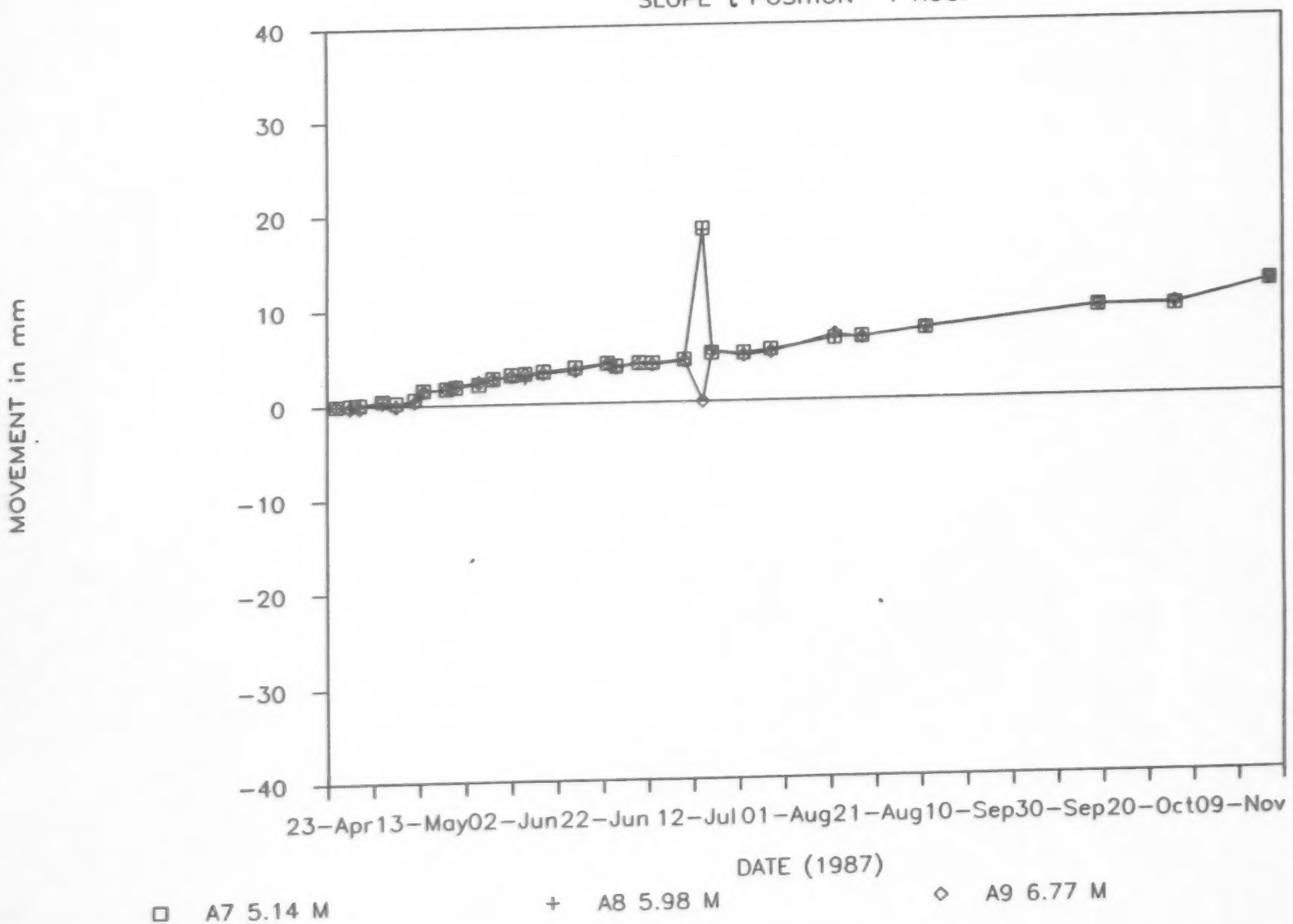
LINGAN EXTENSOMETER SITE

SLOPE 1 POSITION -1 ROOF



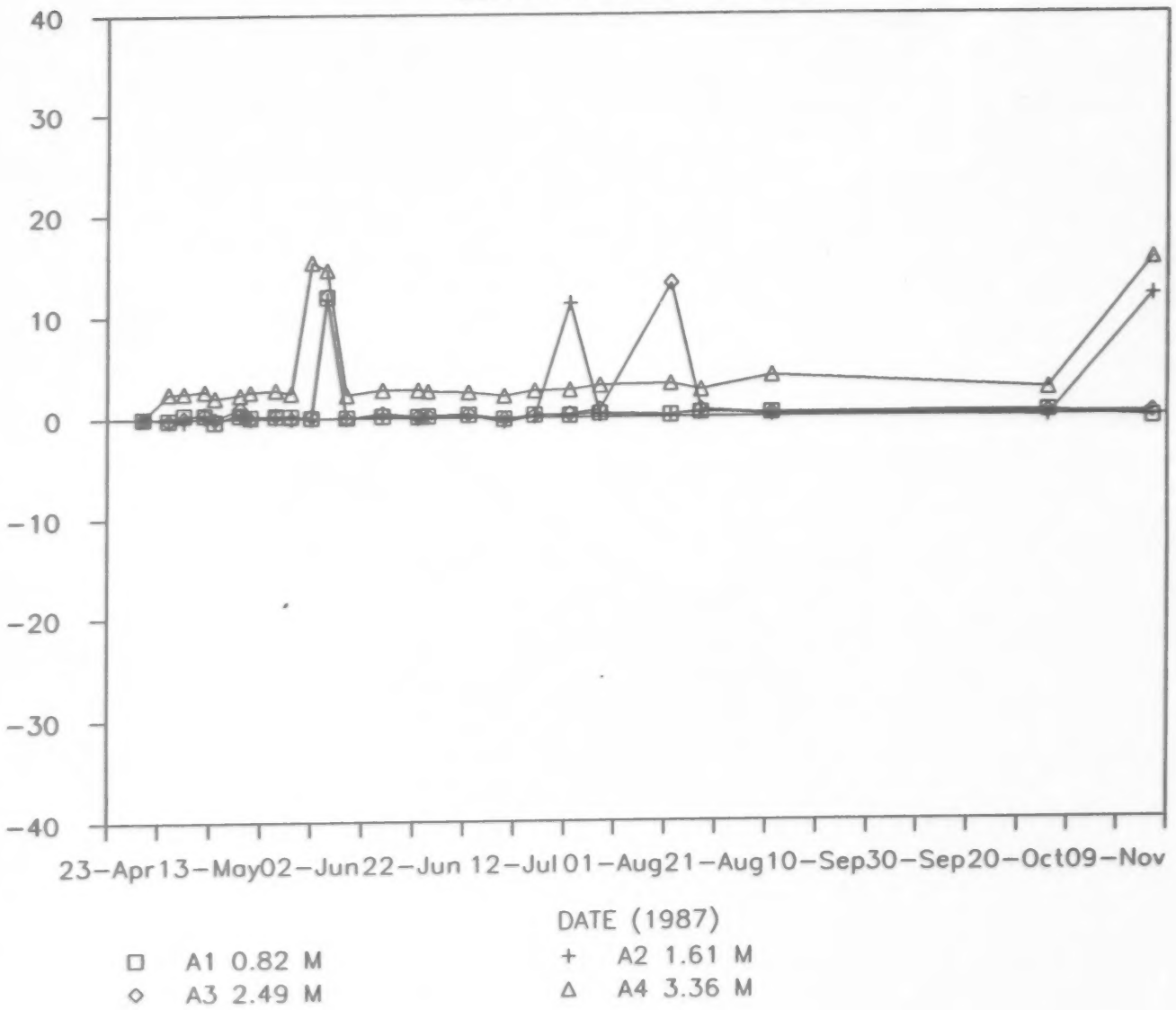
LINGAN EXTENSOMETER SITE

SLOPE 1 POSITION -1 ROOF



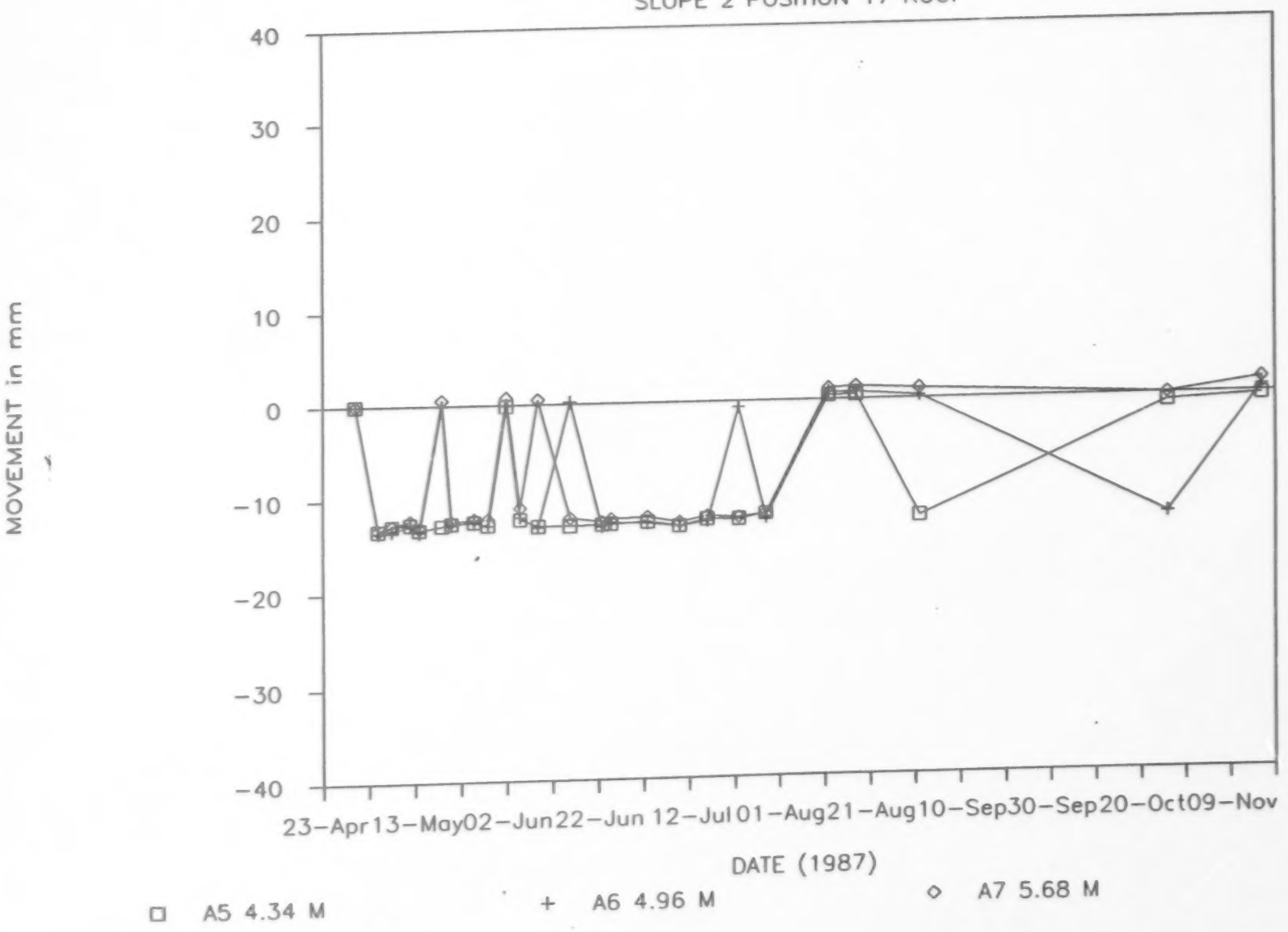
LINGAN EXTENSOMETER SITE

SLOPE 2 POSITION 17 ROOF



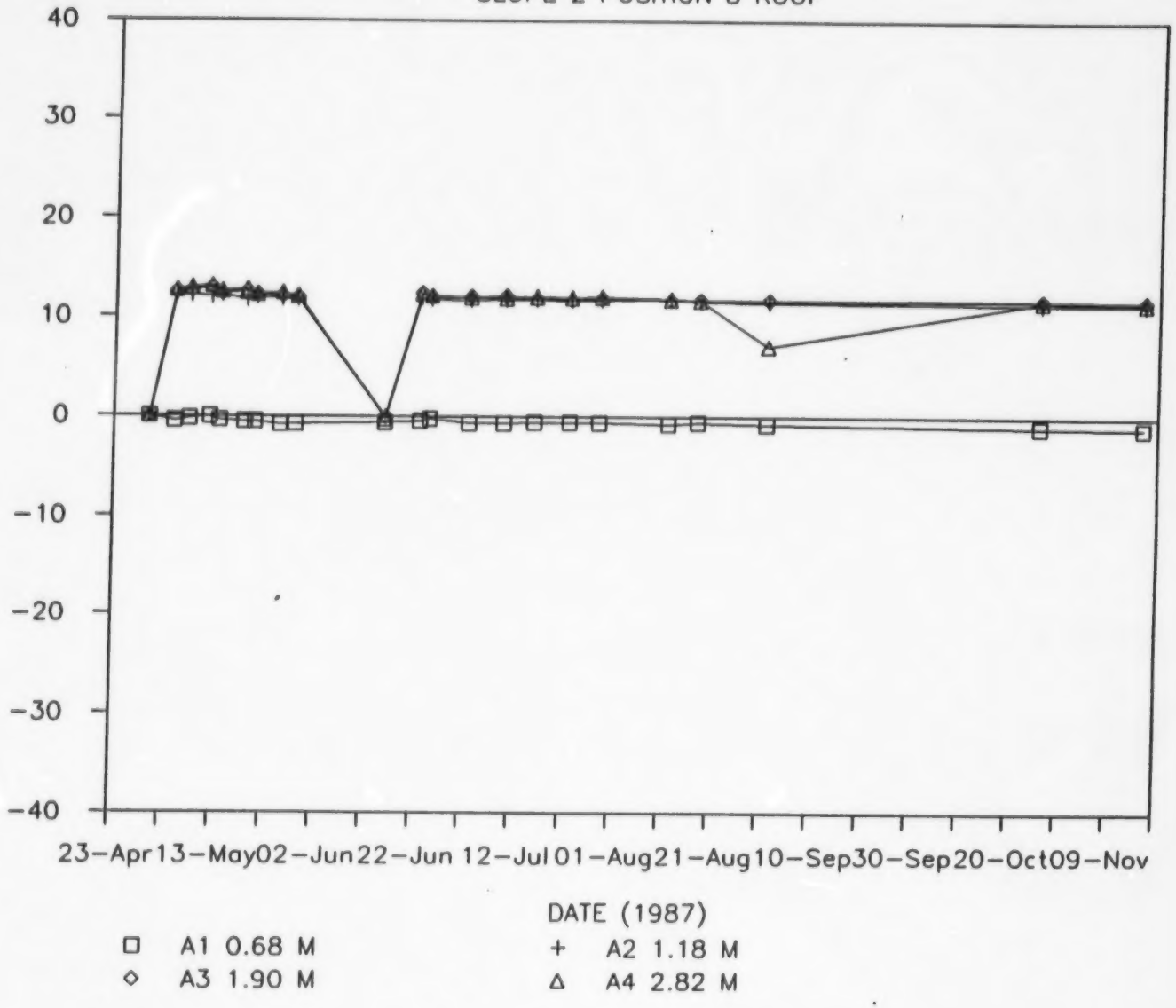
LINGAN EXTENSOMETER SITE

SLOPE 2 POSITION 17 ROOF



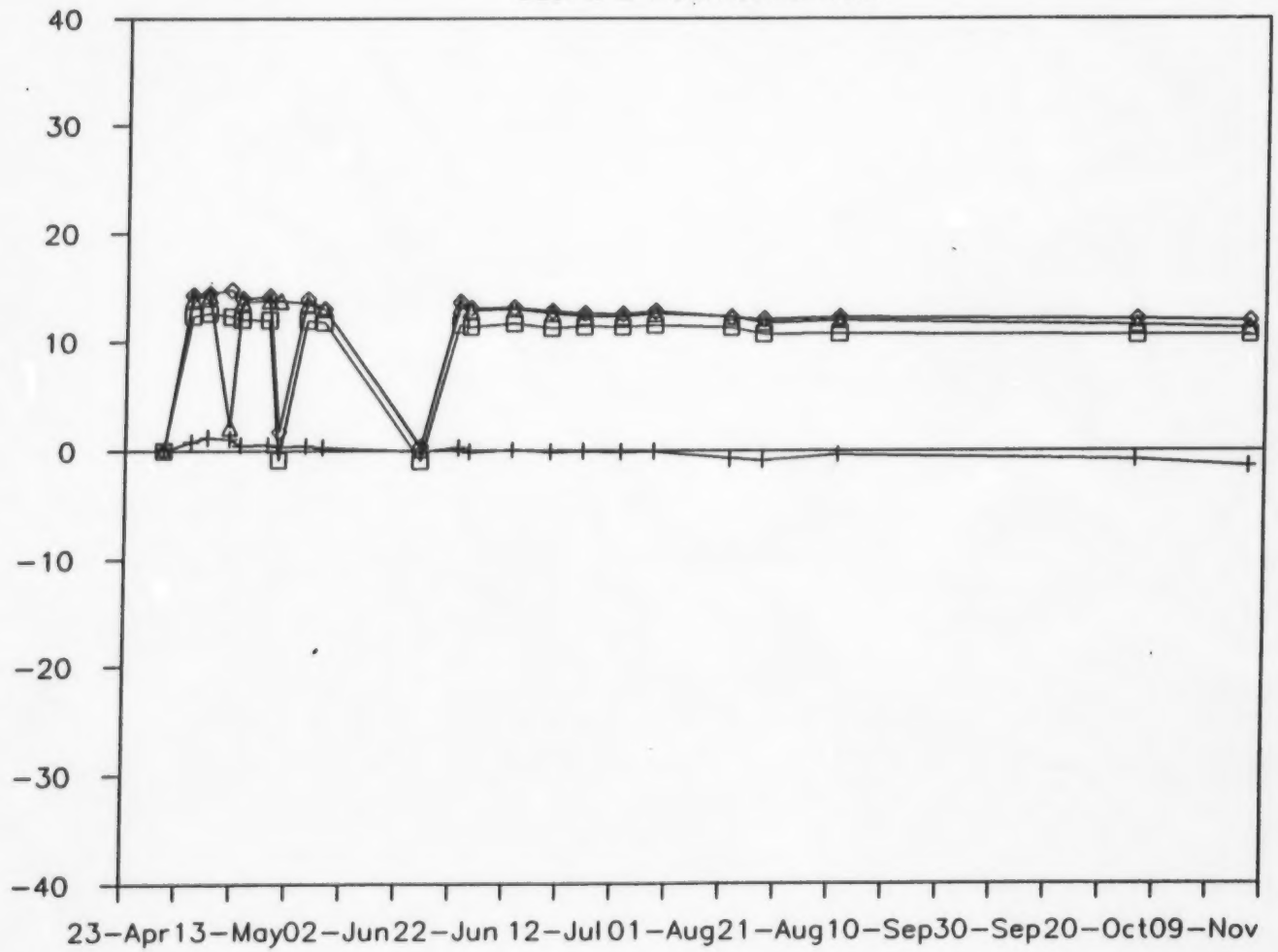
LINGAN EXTENSOMETER SITE

SLOPE 2 POSITION 8 ROOF



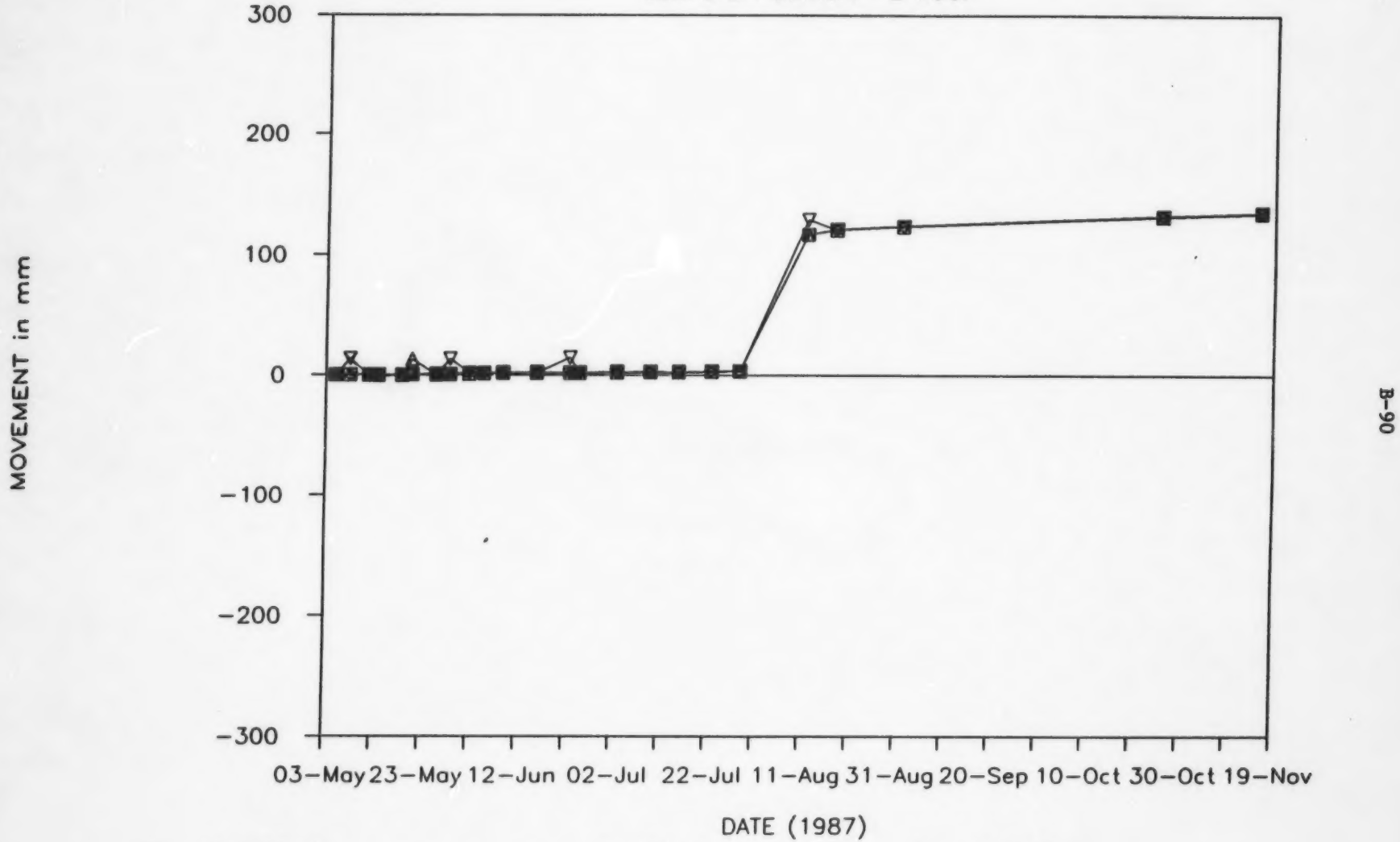
LINGAN EXTENSOMETER SITE

SLOPE 2 POSITION 8 ROOF



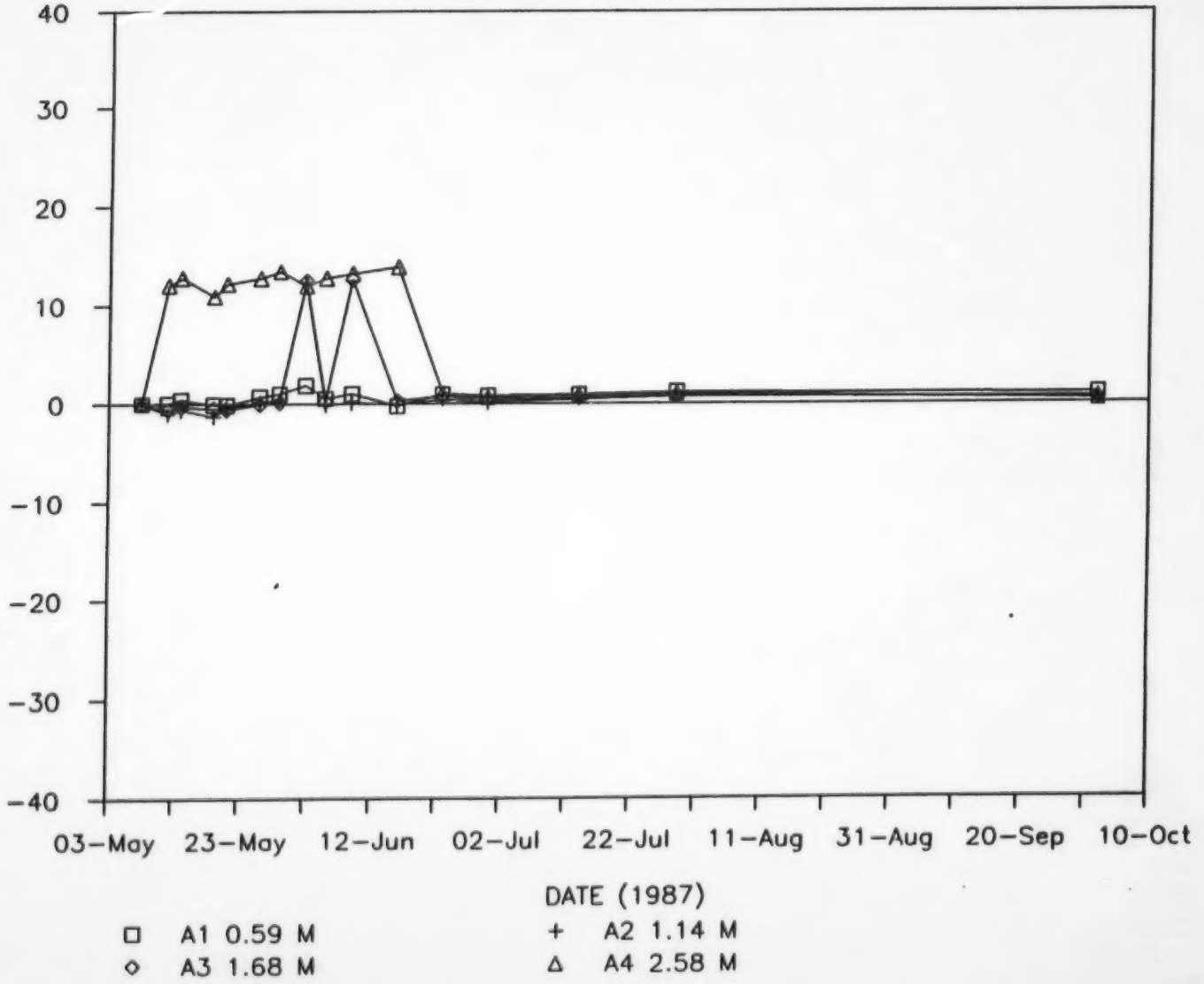
LINGAN EXTENSOMETER SITE

SLOPE 2 POSITION -2 ROOF



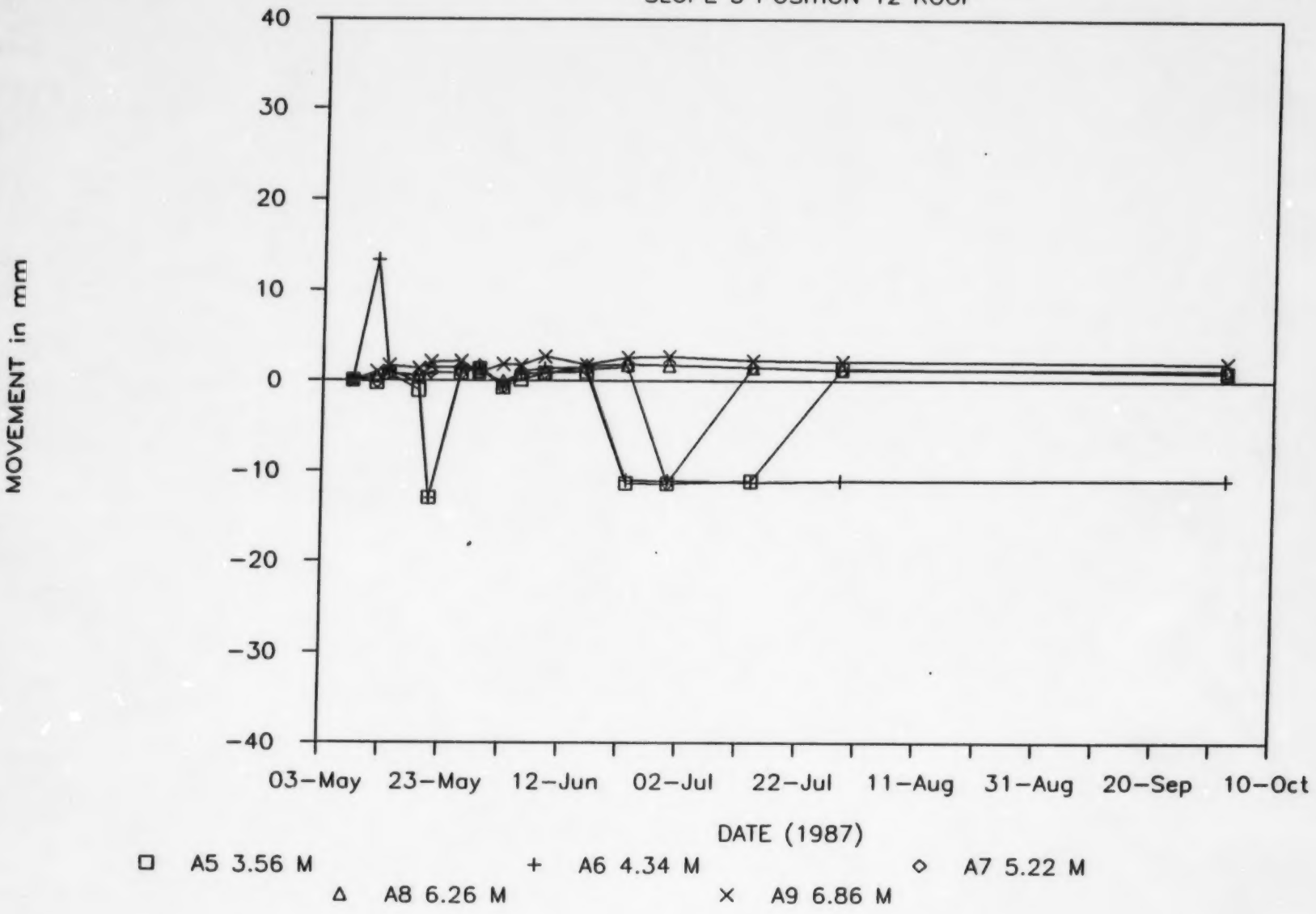
LINGAN EXTENSOMETER SITE

SLOPE 3 POSITION 12 ROOF



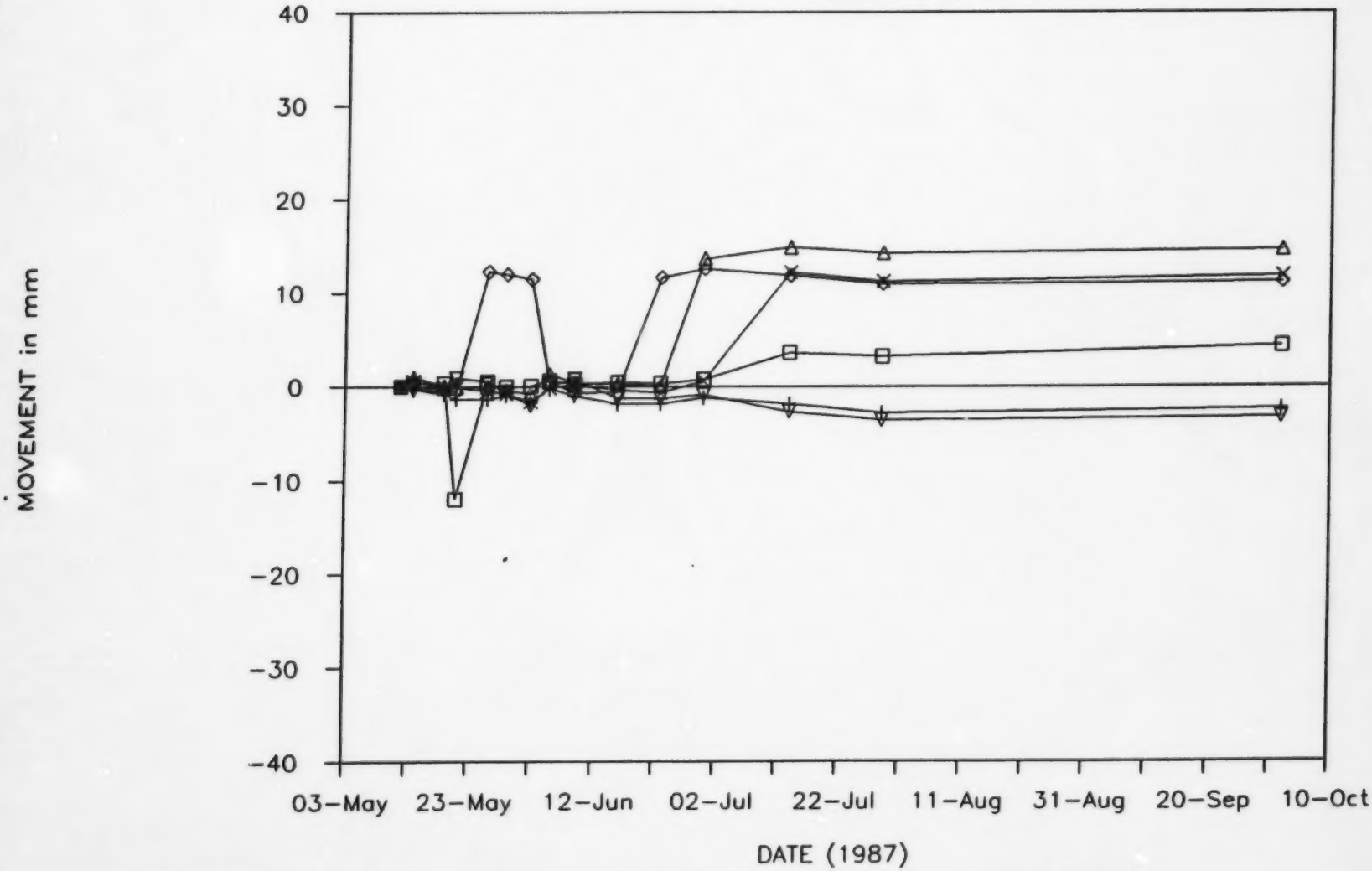
LINGAN EXTENSOMETER SITE

SLOPE 3 POSITION 12 ROOF



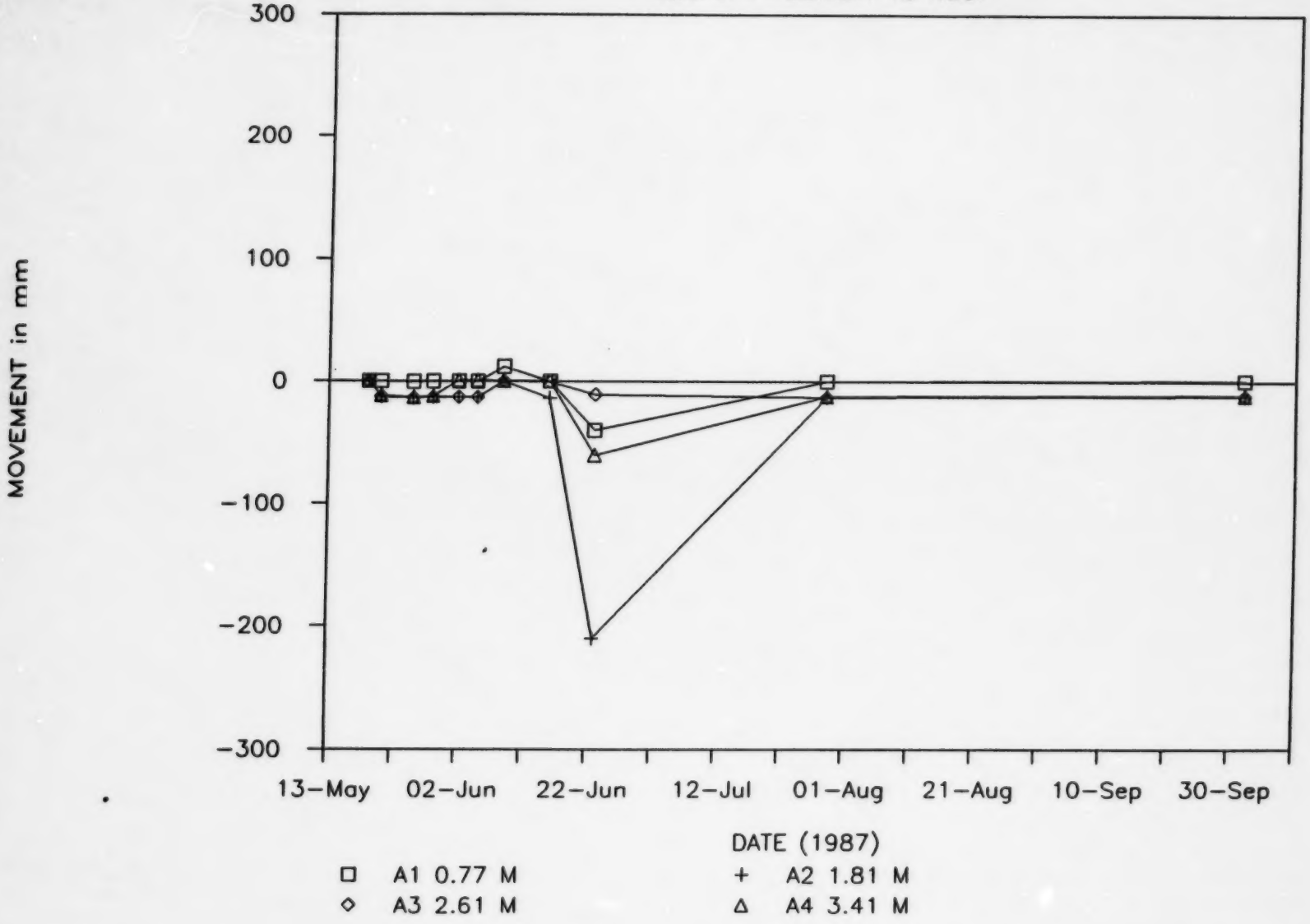
LINGAN EXTENSOMETER SITE

SLOPE 3 POSITION 2 ROOF



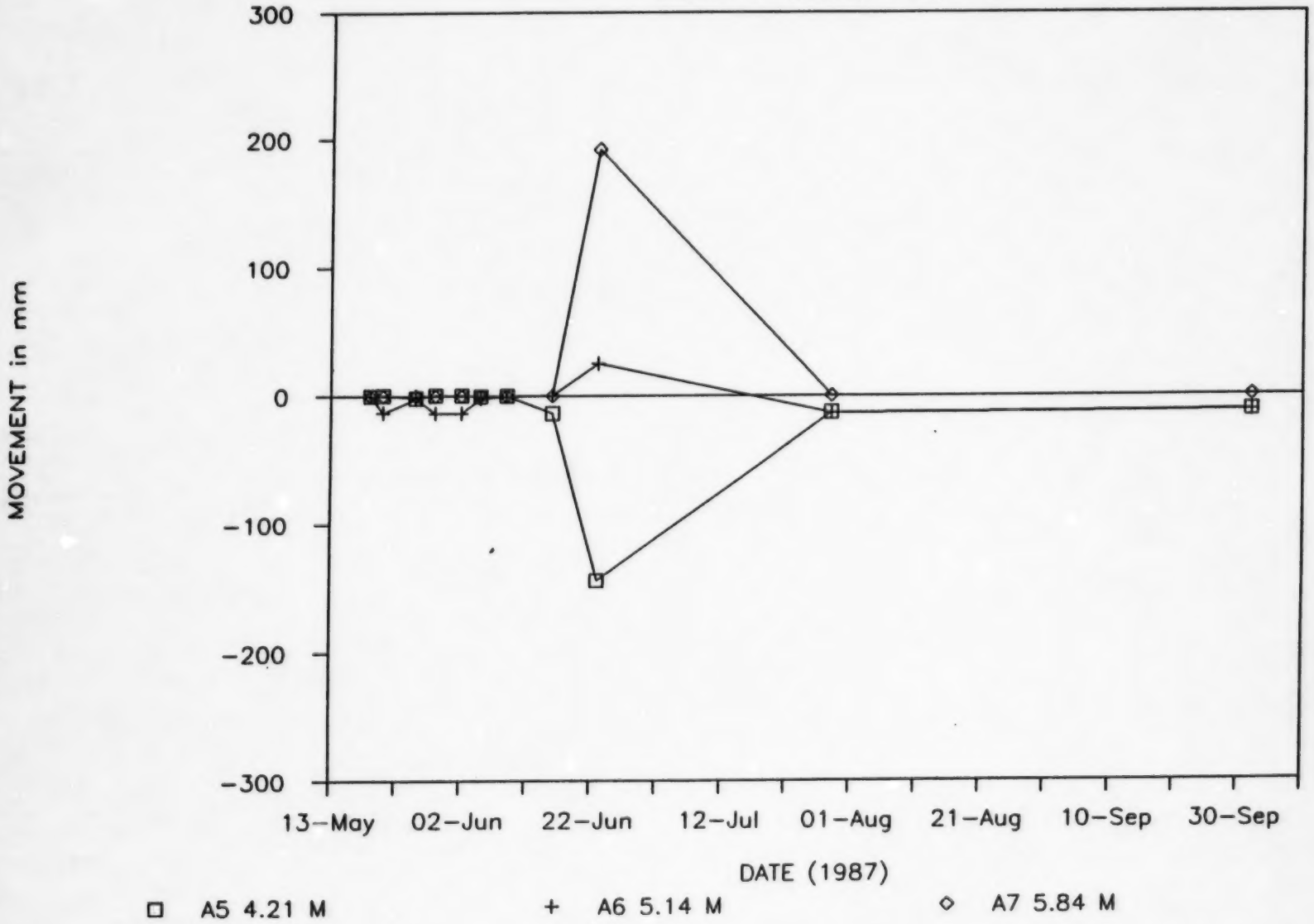
LINGAN EXTENSOMETER SITE

SLOPE 4 POSITION 12 ROOF



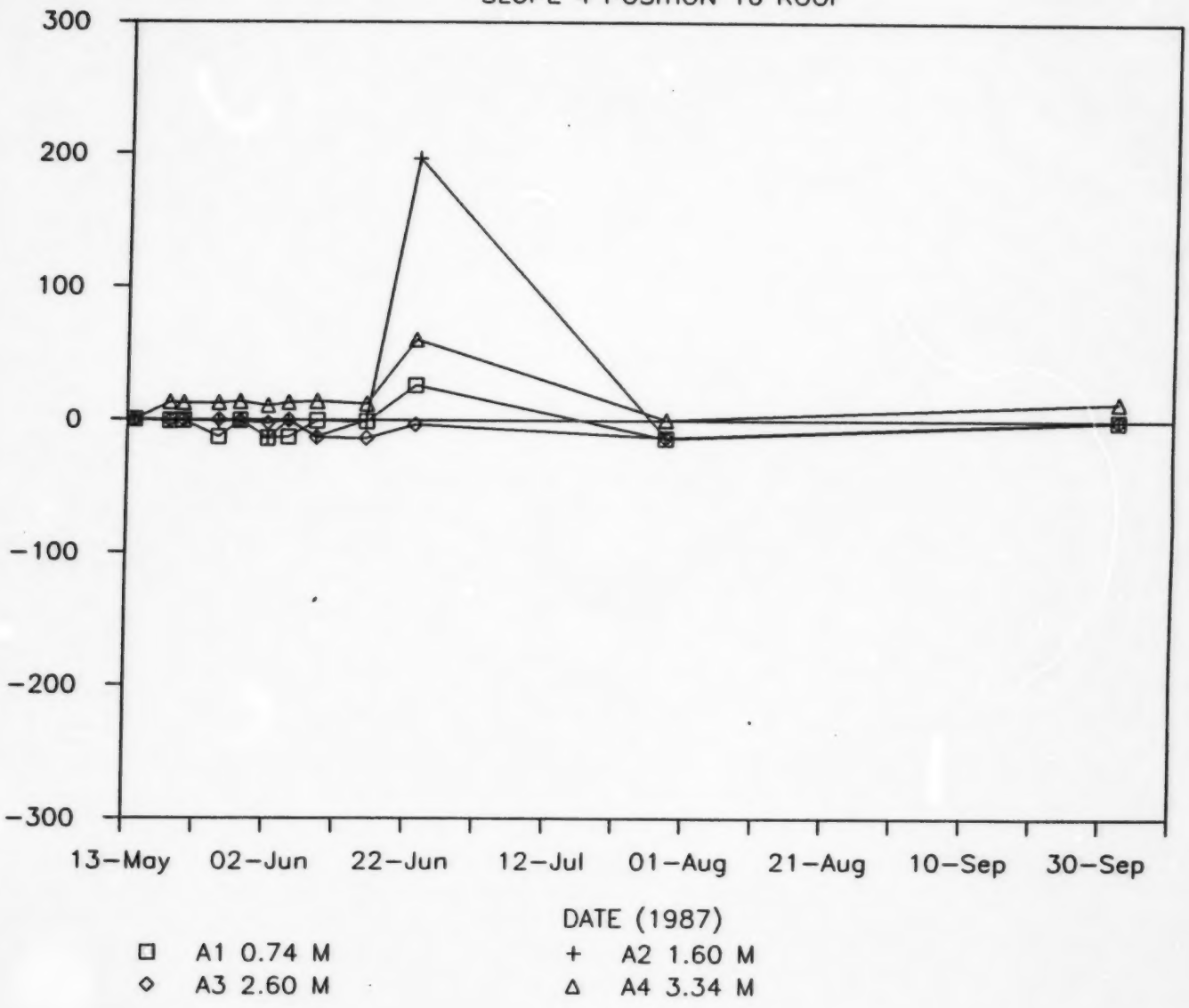
LINGAN EXTENSOMETER SITE

SLOPE 4 POSITION 12 ROOF



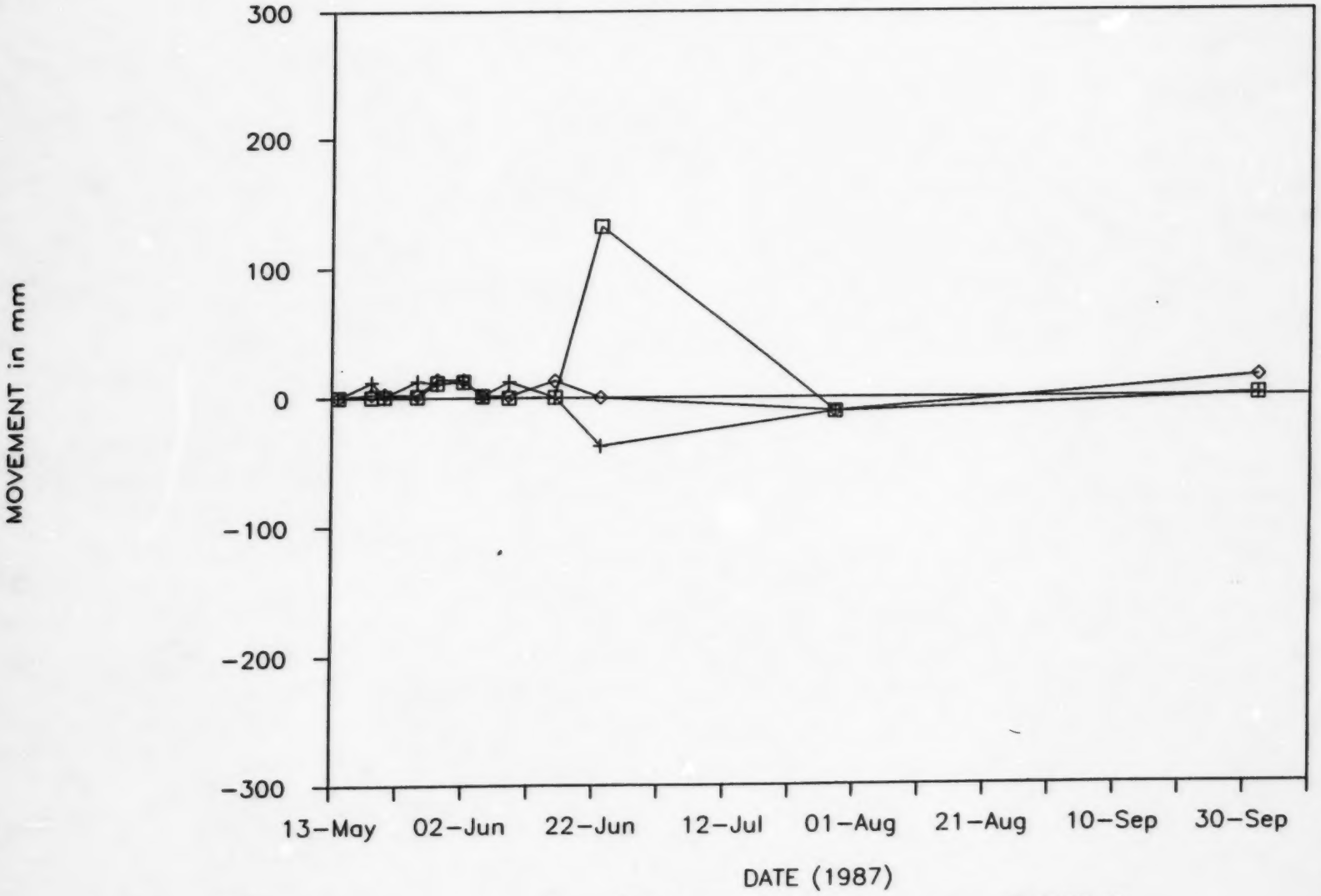
LINGAN EXTENSOMETER SITE

SLOPE 4 POSITION 16 ROOF



LINGAN EXTENSOMETER SITE

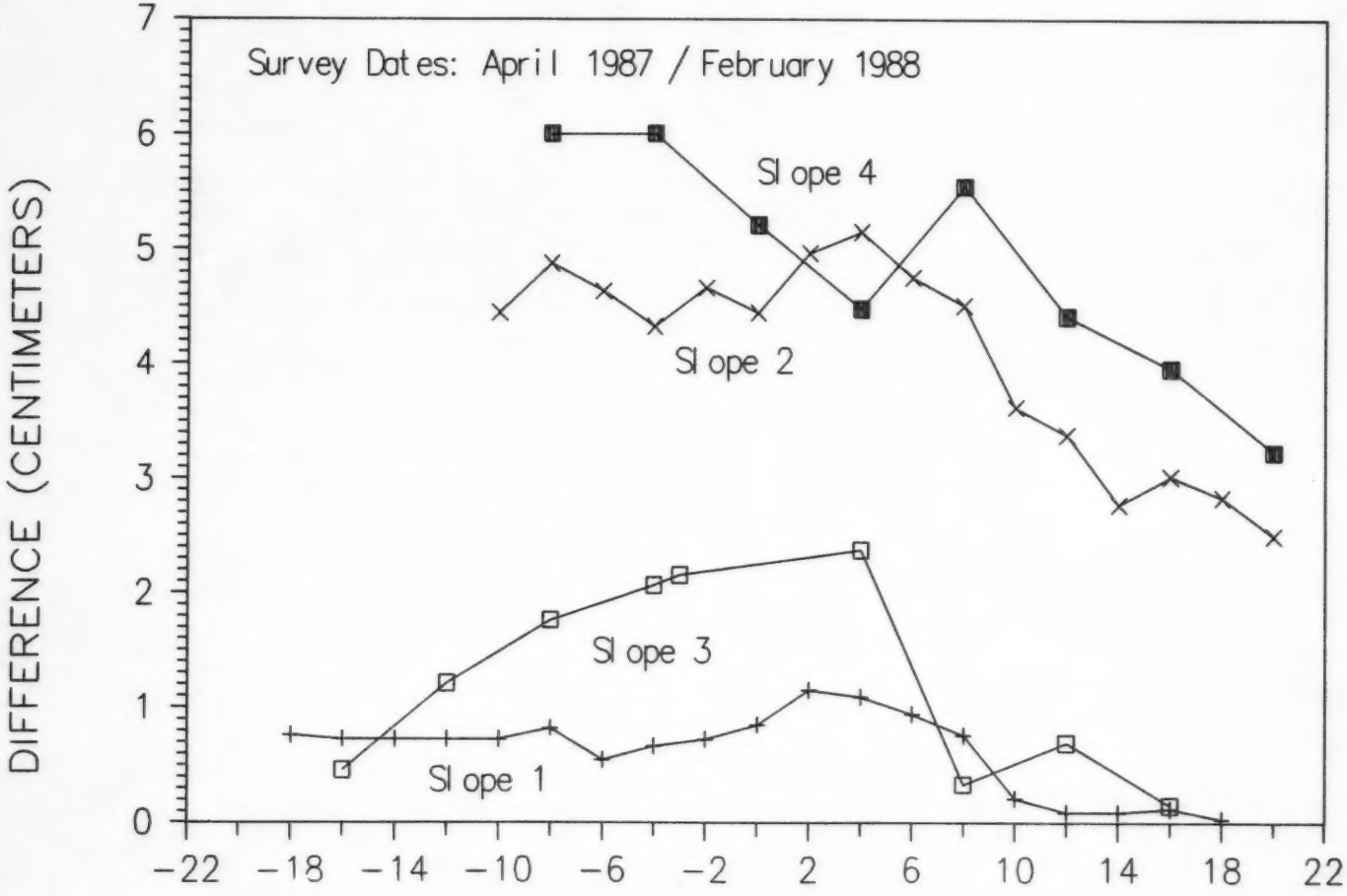
SLOPE 4 POSITION 16 ROOF



APPENDIX C

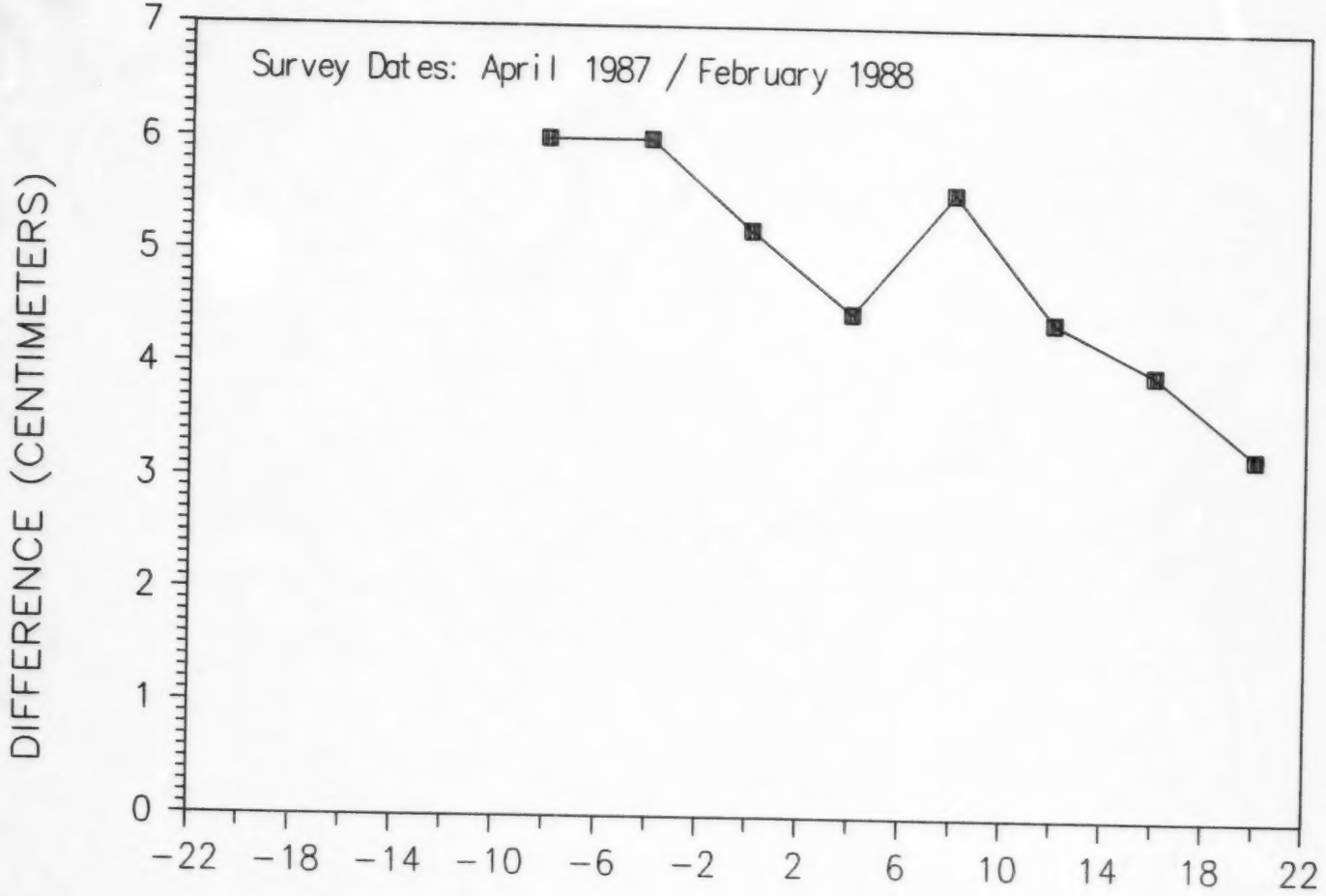
ELEVATION CHANGES OF TILTPLATES

TILTMETER LEVELING SURVEY



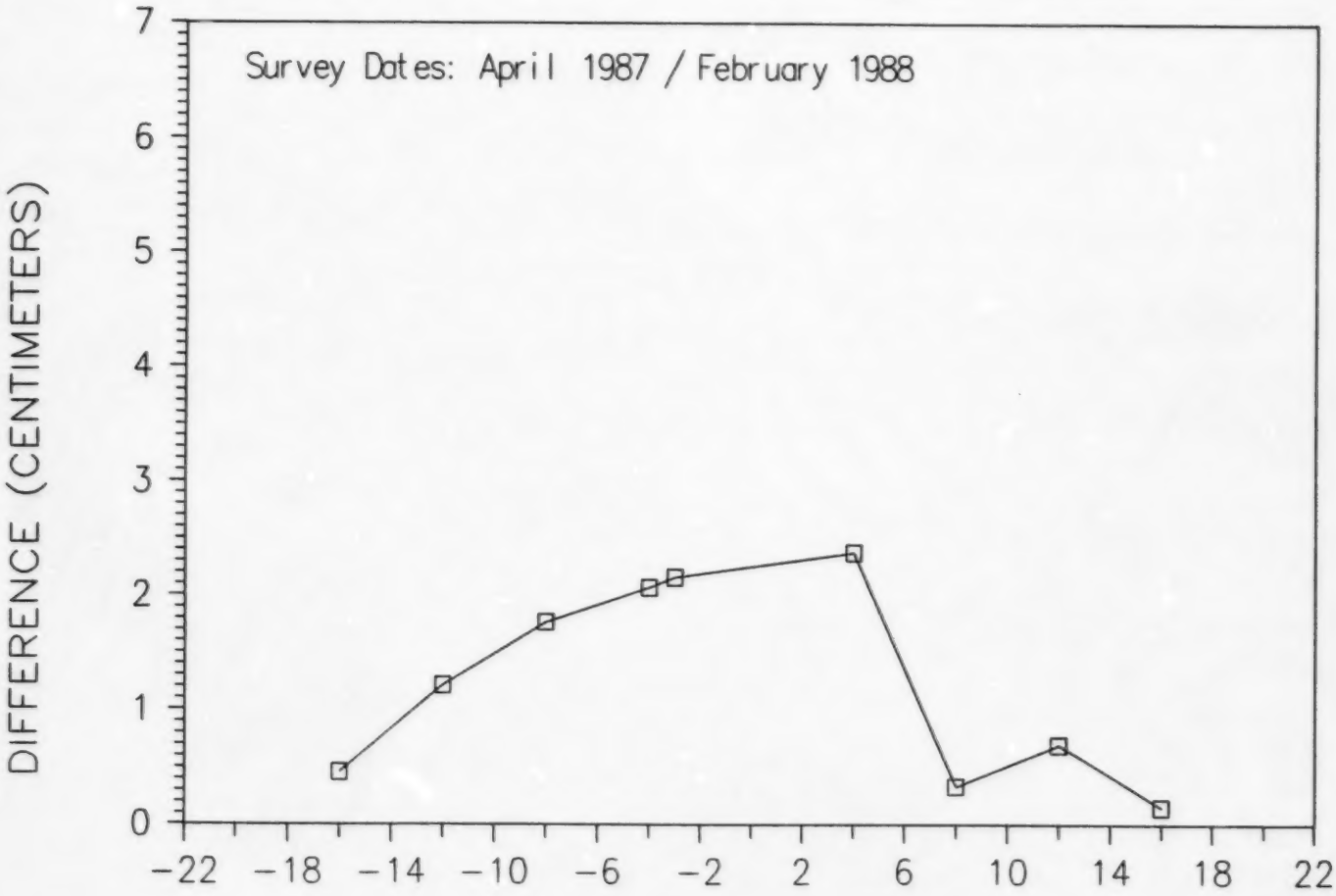
LINGAN MINE SLOPES 1,2,3 & 4

TILTMETER LEVELING SURVEY



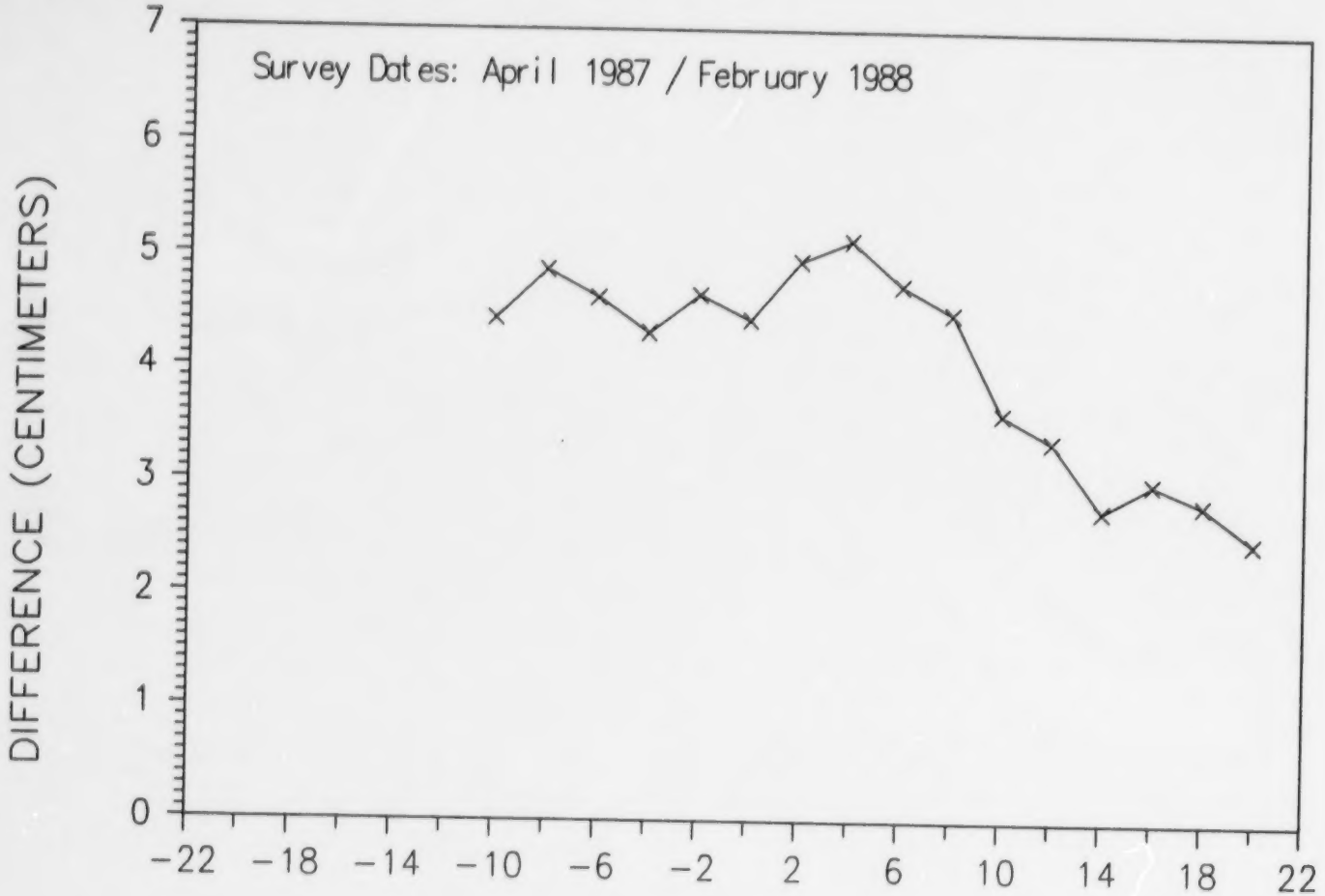
LINGAN MINE SLOPE 4

TILTMETER LEVELING SURVEY

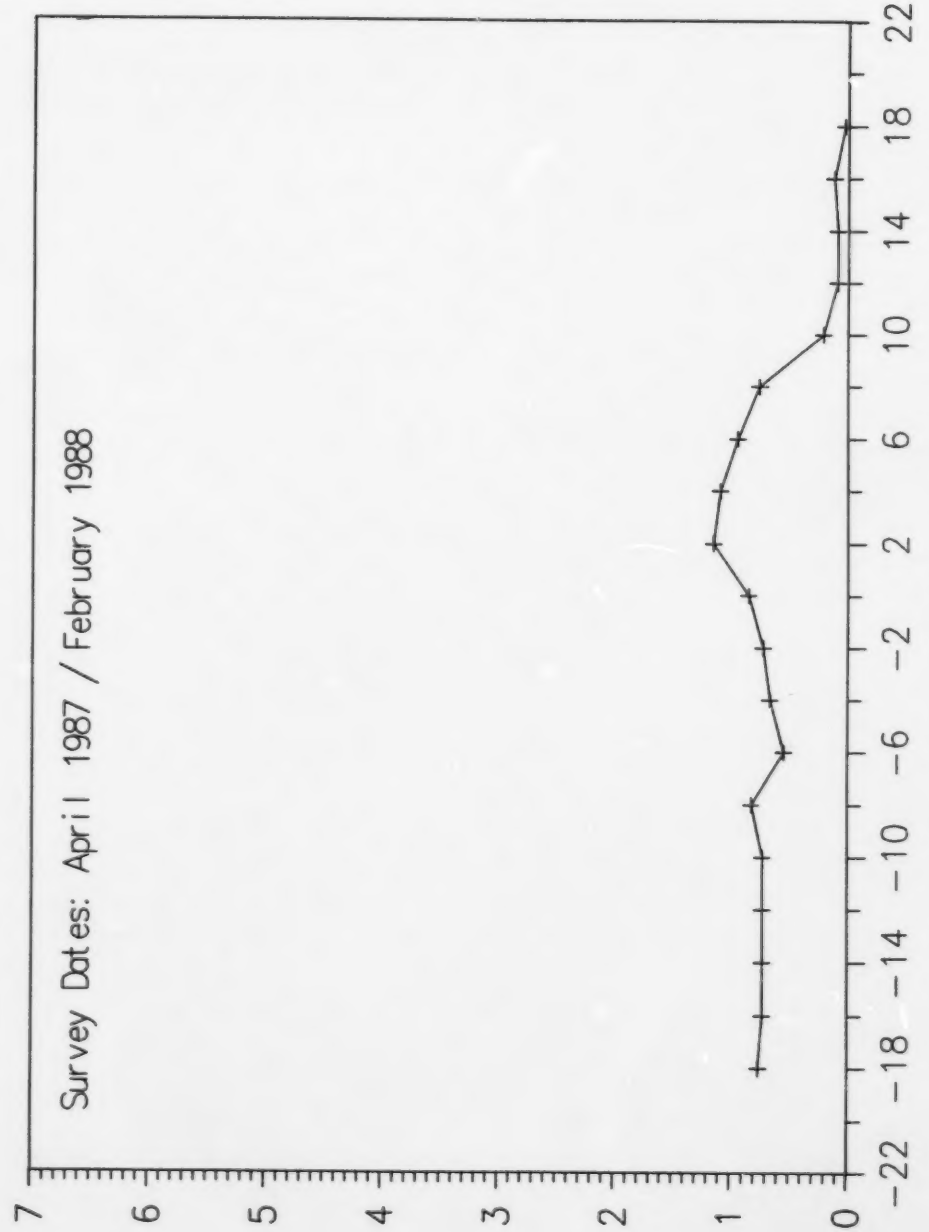


LINGAN MINE SLOPE 3

TILTMETER LEVELING SURVEY



LINGAN MINE SLOPE 2


TILTMETER LEVELING SURVEY
Survey Dates: April 1987 / February 1988
DIFFERENCE (CENTIMETERS)
0
1
2
3
4
5
6
7
-22
-18
-14
-10
-6
-2
2
6
10
14
18
22
TILTMETER No.
LINGAN MINE SLOPE 1